Lyndale Neighborhood Association
Problem Properties Handbook

Prepared by
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Conducted on behalf of
Lyndale Neighborhood Association
December, 2009

This report (NPCR 1308) is also available on the CURA website:
www.cura.umn.edu/search/index.php

December, 2009

Neighborhood Partnerships for Community Research (NPCR) supported the work of the author of this work, but has not reviewed it for publication. The content is solely the responsibility of the author and is not necessarily endorsed by NPCR.

NPCR is coordinated by the Center for Urban and Regional Affairs at the University of Minnesota. NPCR is supported by the McKnight Foundation.

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LYNDALE NEIGHBORHOOD ASSOCIATION
PROBLEM PROPERTIES
HANDBOOK

2009

This project was supported through student research assistance provided by the Neighborhood Partnerships for Community Research, a program of the University of Minnesota's Center for Urban and Regional Affairs (CURA). It was completed during the spring and summer of 2009 for the Lyndale Neighborhood Association (LNA). Through this grant the LNA was able to hire a graduate research assistant to develop a system to look at problem properties in the neighborhood.

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I. EXECUTIVE SUMMARY

The Memphis Community Development Partnership defines problem properties quite effectively as, "…any abandoned, vacant or occupied structure, lot or premise, which creates dangerous conditions that significantly affect the public health, safety, and welfare including but not limited to fire hazards, unsanitary conditions, criminal activities, general dilapidation and structural deficiencies" (2004). It was the goal of the Lyndale Neighborhood Association (LNA) located in south Minneapolis to develop a system so that they can better address problem properties in their neighborhood. The system that was developed uses a mixed approach; including a visual survey of every property in the neighborhood, gathering information from the city, developing a complaint intake system, and linking them together for analysis and monitoring in a geographic information system (GIS). The following report introduces what exactly is meant by problem properties, methods used by LNA, guidance how to set up this GIS system, and thoughts for further development.

II. INTRODUCTION ON WAYS TO MANAGE PROBLEM PROPERTIES

INTRODUCTION

It is the goal of the Lyndale Neighborhood Association (LNA) to develop a collaborative system to be able to monitor, assist, and react to problem properties located within the neighborhood. The Lyndale neighborhood is located in south Minneapolis bound by Lake Street on the north, 36TH Street on the south, Lyndale Avenue on the west, and Interstate 35W on the east. In an effort to continue to improve the neighborhood, the LNA is attacking the properties that pose risks to the health and safety of the community. There have been numerous efforts around the Twin Cities metropolitan area as well as across the nation to deal with what are called *problem properties*. Organizations, such as neighborhood associations similar to LNA or city governments, have developed various methods on how to deal with problem properties. Prior to any enforcement of problem properties an organization must define exactly what it regards as a problem. Once a definition has been developed a system on how to approach correcting the problem can be established. The following sections examine various definitions of problem properties and how various organizations locally and nationally have attempted to manage them.

DEFINING PROBLEM PROPERTIES

Most organizations share a relatively similar definition of what they regard as problem property. Problem properties are typically broken down into two main categories (1) structure related or (2) people related (Corcoran Neighborhood Organization 2002; Jakus 2009). Some of the commonly referred to structure related problem property issues are vacancy, boarded, foreclosed, permit violations, tax delinquency, bankruptcy, and eyesores such as garbage or deteriorating exteriors. The people related issues are in reference to various activities occurring on a property related to criminal behavior (Corcoran Neighborhood Organization 2002; Jakus 2009). The Saint Paul City Council stated in a report that a problem property is an area that, "Disrupts or threatens the peace, health, and safety of the community" (1995). They also add that a problem property that is dilapidated or deteriorating is a common attractant for criminal activity (Saint Paul City Council 1995).

The Memphis Community Development Partnership summarizes all of these attempts to define problem properties quite effectively as, "…any abandoned, vacant or occupied structure, lot or premise, which creates dangerous conditions that significantly affect the public health, safety, and welfare including but not limited to fire hazards, unsanitary conditions, criminal activities, general dilapidation and structural deficiencies" (2004). This definition references the structural and human related issues regarding problem properties as well as the effects on the community or neighborhood.

DEALING WITH PROBLEM PROPERTIES

There are three typical ways in which communities approach the issue of dealing with problem properties. The most common being a complaint-based response system to a problem property. In this approach a problem essentially does not exist until a complaint is issued, typically from a disturbed neighbor. Second, communities take a proactive approach by going out and completing surveys of the properties in the neighborhood. Surveys are typically conducted by neighborhood organizations and volunteers who live in the area. Each property is visually surveyed using some form of standardized survey looking at the condition of the lot and structures as they exist. Finally, a mixed approach between complaints, surveys, and other sources of data is used to monitor and take action on problem properties. This approach attempts to assemble all of the information possible to assess whether a property is a problem and may also try to quantify the level of risk it may pose to the public.

Complaint-based

One example of the complaint-based approach is the Corcoran Neighborhood Organization (CNO) Problem Property Caucus. The Corcoran Neighborhood is located in south Minneapolis and the Problem Property Caucus consists of members from the CNO, Minneapolis city council office, Minneapolis housing inspections, CCP/SAFE, and any other invited party. The caucus holds private meetings monthly to discuss problem properties that have either been identified by a member of the caucus or complaints made by a number of residents. In the meetings, the caucus discusses methods on how to handle each problem property individually. While all of the meeting minutes are confidential, tallied reports are made public to those in the neighborhood. This is a safety measure to maintaining privacy of residents (Corcoran Neighborhood Organization 2002).

Longfellow Community Council (LCC), which represents the Longfellow Community in Minneapolis, has a similar approach as CNO. A monthly meeting is held by LCC and the neighborhood safe officer, city council aides, and other city officials bring information of complaints made regarding specific properties. They discuss the best way to resolve the problem and as well as if the problem still exist. If complaints are made to LCC they typically pass it along to the police and city inspectors (Jakus 2009).

The Marshall Terrace neighborhood simply has a phone answering service and website where community members can file complaints. These complaints are then passed along to the appropriate city office (Langason 2009).

After discussions with members from other neighborhood organizations and city employees, they feel that an approach similar to CNO or LCC is the most effective. By concentrating efforts on 4 – 6 specific problem properties a month, they feel that the issues are resolved quicker.

Survey-based

The survey-based approach is much more proactive than complaint-based. The Memphis Community Development Partnership (MCDP), Problem Properties Collaborative (PPC), and the University of Memphis Center for Community-Building and Neighborhood Action emphasize this method of dealing with problem properties (Memphis Community Development Partnership 2004; www.mcdpinfo.org). Recently, a problem properties audit was launched throughout the city of Memphis, called Neighborhood by Neighbor. The Neighborhood by Neighbor is a community based project where a block by block sweep is taken with handheld computers recording blighted properties. Volunteer groups of two or more go up and down the streets documenting blight properties. These groups are trained on how to use the technology as well as common housing violations. The data from the surveys are being used to push decision making regarding blight to standards satisfactory to the community (http://memphisneighborhoodsurvey.org/).

A similar approach was used by the All Saints Neighborhood Center located in Detroit, Michigan. A teen club went around with portable PCs and documented dangerous properties, abandoned vehicles, illegal dumping, and vacant/boarded homes. This survey was to be completed yearly to continuously monitor problem areas (http://maps.culma.wayne.edu/knightweb/profile.cfm?result=13).

Mixed-approach

There have been a couple of attempts to combine the complaint-based with a survey-based or data gathering approach when dealing with problem properties. The first example is Dayton's Bluff Community located in Saint Paul, MN. A committee was formed to make decisions regarding problem properties. The committee consisted of members from the Dayton's Bluff Community Council, city council member aides, inspectors, police, and legal services. It was also open to the public. Information was collected from numerous sources such as 311/911 complaints, police reports, utility services, inspection reports, and neighborhood complaints. All of this information was gathered on properties and in the monthly meetings the committee would discuss the appropriate action to take. Typical strategies included sending out letters to property owners, tenants, or neighborhoods stating that they are considered a problem property. If the problem persists or is not taken care of, enforcement by officials is taken (Eastside Community Outreach Partnership Center 1999).

A second example of a mixed-approach to deal with problem properties was in the Logan Park neighborhood in Minneapolis. The goal of the project by the Logan Park Neighborhood Association (LPNA) was to develop a system to collect and catalog information relating to problem properties. A database was developed gathering background information on properties to substantiate whether it is a problem or not. Some of the background information to be gathered was housing violations, police reports, utility shut-offs, rental registration, and tax delinquency. The second type of information was completed by a visual drive by survey of each property. A system was developed to evaluate each property, which was then entered into the

database. Once all of this data was compiled into the database, a rating was assigned to each property, and if a specific value was given that property was deemed a problem. LPNA would send out letters to all owners or taxpayers stating their property was considered a problem property and gave them information or insight on how to improve the situation. This simple step led to a significant response from the taxpayers (Stark 1999).

CONCLUSION

Most approaches tend to take a responsive approach when dealing with problem properties. It is much easier to respond to a problem that comes to you rather than attacking it before becoming a problem. Also, the other methods take more resources to complete surveys, develop databases, as well as having to deal with the complaints. One flaw with just completing a visual survey is that it may miss properties that are problems. A property may be aesthetically accepted, but the activities occurring within structures can be difficult to document.

A mixed-approach is seemingly the most appropriate, yet it requires the largest allocation of resources. This approach gathers as much information on a property as it can to evaluate whether it is a problem for the community. However, it also takes a lot of resources to be effective. Collaboration with various city departments is needed so that data is continuously being updated. Also, surveys need to conducted regularly to keep up to date information. This approach would seem to be the most effective but it is also the most difficult as most data is not collaborately and strategically collected and analyzed (Betts 2004).

Some recommendations for LNA in developing a problem property information management system are to develop a data intake system. The data intake system should comprise two data types, community and city organized data. The city data will include such things as police and inspection reports, foreclosure lists, VBR list, etc. The community organized data will include information gathered by a neighborhood survey of each property and complaints by citizens. A system to receive complaints should be established and marketed to the neighborhood. This serves two purposes. First, it tells the neighborhood who to contact regarding a problem with a neighbor. Second, it lets the neighborhood know that problem properties are being watched.

While it is very important to have a collaborated effort with the city of Minneapolis and its various departments, the LNA problem property initiative must be able to exist on its own as well. Stronger collaboration will only improve LNA's ability to improve the neighborhood, but the city may have different standards regarding problem properties than the neighborhood. It is an issue of scale. The city is interested in improving the whole, not just the Lyndale neighborhood. After reviewing other neighborhood organizations approaches to problem properties, this is their biggest limiting factor. They rely on the city to define and for the majority deal with problem properties. By collecting its own data and including city data, LNA controls how problem properties are defined, analyzed, and handled. Finally, a plan or guidance needs to be developed on how to handle once a property is considered a problem. Some

examples are sending letters to the taxpayer, contacting inspections or the police. Neighborhood organizations have developed systems similar to this one but for the most part have not remained intact. They tend to last for a short period of time and then deteriorate or simply become complaint-based. For this system and initiative to succeed it needs to be developed as simplistic as possible and easily maintainable, otherwise it will become too much of a burden. This may become difficult as more data is obtained.

Works Cited

Betts, Phyliss. Toward a Comprehensive Anti-Blight Strategy for Memphis Neighborhoods. White Paper. University of Memphis. November 2004.

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Gustafson, Eric – E-mail. Corcoran Neighborhood Organization. 2 February 2009.

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Memphis Community Development Partnership. Problem Properties Collaborative. January 2004.

Stark, Christine. Logan Park Neighborhood Association Problem Properties. Neighborhood Planning for Community Revitalization. University of Minnesota, 1999.

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III. LNA'S PROBLEM PROPERTY PROJECT DEVELOPMENT

After reviewing the literature and many discussions amongst project team members (LNA staff and myself), we decided to use a mixed approach to locate and analyze problem properties similar to examples provided above on a yearly basis. Staff felt that a yearly survey would provide enough valuable information, remain relatively current, while not becoming too burdensome. It was decided that data would be brought in from multiple sources and analyzed using a geographic information system (GIS). LNA received a single-seat license of ESRI's ArcView GIS software at a reasonable non-profit rate. Some initial parcel data was obtained from the Center for Urban and Regional Affairs (CURA).

The mixed approach that was developed consisted of a visual survey of each property in the neighborhood as well as gathering information from government entities. Volunteers and staff took paper surveys and walked up and down the streets and alleys completing a survey for each property. The survey design is discussed later in this guidance. It took approximately 15 – 30 minutes to survey one side of a block. In addition to the survey, a complaint database was developed for LNA staff to enter complaints that they receive. Complaints may include phone calls to staff, problems seen by staff, walk-ins, etc.

As a supplement to the information gathered by the surveys, information was requested from the city of Minneapolis. LNA's Problem Property Committee developed an extensive list of data that they would like from the city. After discussing our project with the city the list shrank to include rental licenses, requests for services, violations, and foreclosures. There were a number of reasons that the list shrank. One being, some of the data requests provided very little data, others were aggregated by block (crime data) and didn't give us the level of detail we were hoping, and some weren't made public. Also, it is the hope that some of this information will be available to the neighborhoods through the city of Minneapolis's new MNIS (Early Warning) system being developed.

Once the surveys are complete and data has been received they will be brought together and analyzed using ArcGIS. The following pages discusses how this process was completed in great detail.

Given this is in the early development stages for LNA, it was decided that it needs to remain simplistic and not become too time intensive to maintain. The survey was designed in an attempt to keep things simplistic while also receiving valuable information in return. The data received from the city of Minneapolis will also be requested once or twice a year, and given they are not extremely large datasets it is manageable. Given staff have many other responsibilities and duties; it was the hope that this system will not be a burden to maintain.

IV. CONTACTS

City of Minneapolis

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Who to contact for getting data?

The city data, including rental licenses, request for service, and violations, was received from Maria Dahlen. Each data type was received as an Excel spreadsheet. When requesting data make sure to specify time periods and to include property ID numbers as well. See "Working with Data" section to get city data in a format that can be used for mapping.

Jeff Matson with CURA is willing to e-mail a list of foreclosures to LNA monthly. He is an extremely helpful contact regarding any information. He is also the person to contact to receive yearly updated parcel data.

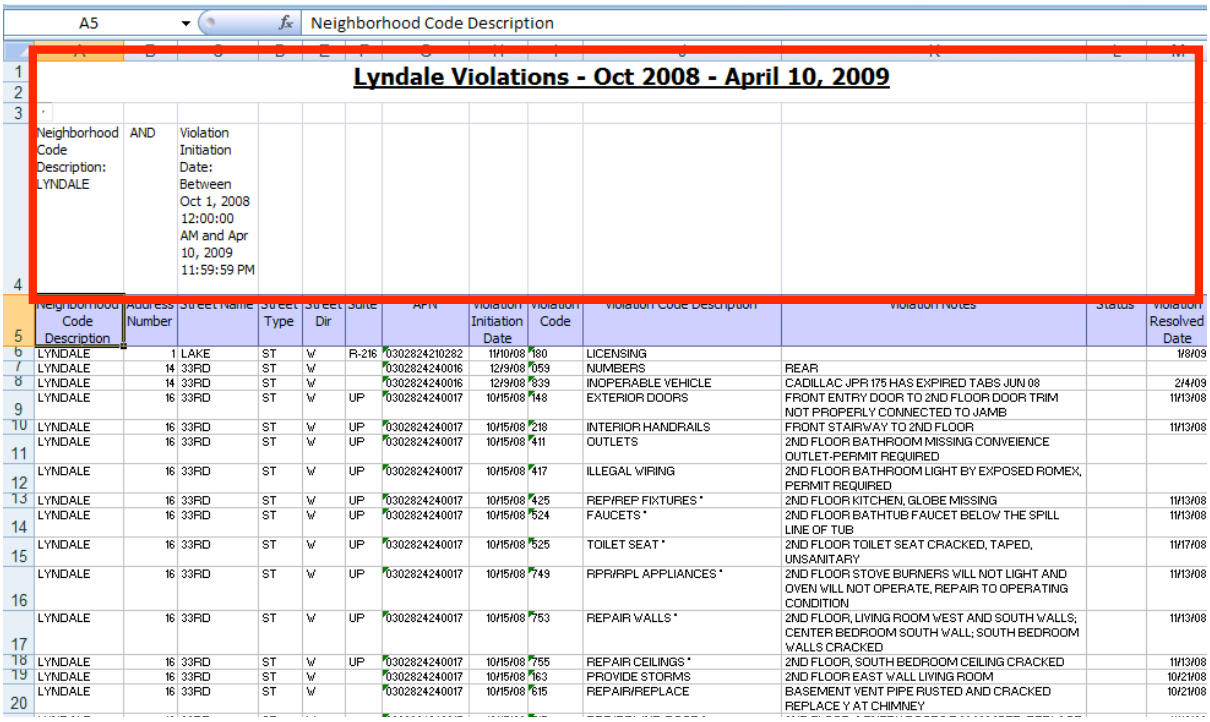
V. INTRODUCTION TO GUIDANCE FOR SETTING UP AND ANALYZING DATA

The purpose of this guidance is to offer assistance so that the layperson can use GIS and other software to analyze problem property issues in the Lyndale neighborhood. This is step-by-step guidance to the way the Problem Property was set up in 2009 for the Lyndale Neighborhood Association (LNA). This guidance was created in the summer of 2009 using ESRI ArcView 9.3 and Microsoft Access 2003. Prior to going through this guidance simply open the software and familiarize yourself with the basic tools and their functions. In ArcView, this can be done by just placing the mouse over an item. A callout stating what that item is will be displayed. Some of the items are self-explanatory, but to see them in action, add some data to the display. See *Map Setup* below on how to add data.

The beginning of the guidance walks the user through working with the data and preparing it for analysis. It also sets up the data for effective analysis. Data was received from numerous sources, and the guidance below walks you through how to get the data to work properly from each one. Once data is in a format that can be used, the guidance walks you through how to bring all of the sources together so they can be analyzed as one. Finally, tips on how to analyze and look at the data is given, as well as how to map it. Many of these steps, tools, and applications may be applied to various data and are in no way restricted to these datasets. To learn more about the tools and functions use the ***Help*** documentation in ArcMap. It is fairly succinct and for most intent and purposes explained for the novice GIS user. As the Lyndale Neighborhood Association continues to develop how they deal with and view problem properties, new data may be needed. It is the hope of this project that it is flexible to be able to incorporate new data and ideas, as well as spread to other projects within the neighborhood.

VI. WORKING WITH OUTSIDE DATA SOURCES

Data Received from City of Minneapolis



A5 | Neighborhood Code Description

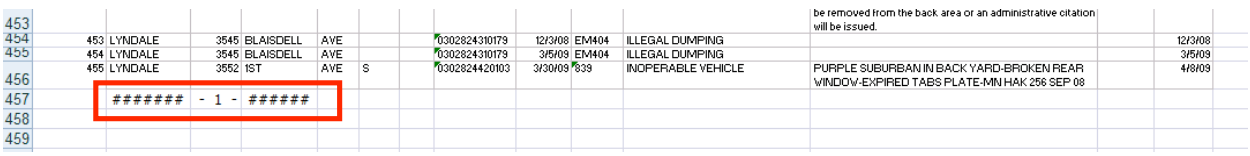
Lyndale Violations - Oct 2008 - April 10, 2009

Neighborhood Code Description: LYNDALE AND Violation Initiation Date: Between Oct 1, 2008 12:00:00 AM and Apr 10, 2009 11:59:59 PM

Neighborhood Code Description	Address Number	Street Name	Street Type	Street Dir	Suite	APN	Violation Initiation Date	Violation Code	Violation Code Description	Violation Notes	Status	Violation Resolved Date
LYNDALE	1	LAKE	ST	W	R-216	0302824210282	11/10/08	180	LICENSING			1/8/09
LYNDALE	14	33RD	ST	W		0302824240016	12/9/08	059	NUMBERS	REAR		
LYNDALE	14	33RD	ST	W		0302824240016	12/9/08	839	INOPERABLE VEHICLE	CADILLAC JPR 175 HAS EXPIRED TABS JUN 08		2/4/09
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	148	EXTERIOR DOORS	FRONT ENTRY DOOR TO 2ND FLOOR DOOR TRIM NOT PROPERLY CONNECTED TO JAMB		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	218	INTERIOR HANDRAILS	FRONT STAIRWAY TO 2ND FLOOR		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	411	OUTLETS	2ND FLOOR BATHROOM MISSING CONVEIENCE OUTLET-PERMIT REQUIRED		
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	417	ILLEGAL WIRING	2ND FLOOR BATHROOM LIGHT BY EXPOSED ROMEX, PERMIT REQUIRED		
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	425	REP/REP FIXTURES *	2ND FLOOR KITCHEN, GLOBE MISSING		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	524	FAUCETS *	2ND FLOOR BATHTUB FAUCET BELOW THE SPILL LINE OF TUB		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	525	TOILET SEAT *	2ND FLOOR TOILET SEAT CRACKED, TAPED, UNSANITARY		11/17/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	749	RPR/RPL APPLIANCES *	2ND FLOOR STOVE BURNERS WILL NOT LIGHT AND OVEN WILL NOT OPERATE, REPAIR TO OPERATING CONDITION		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	753	REPAIR WALLS *	2ND FLOOR, LIVING ROOM WEST AND SOUTH WALLS; CENTER BEDROOM SOUTH WALL; SOUTH BEDROOM WALLS CRACKED		11/13/08
LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	755	REPAIR CEILINGS *	2ND FLOOR, SOUTH BEDROOM CEILING CRACKED		11/13/08
LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	163	PROVIDE STORMS	2ND FLOOR EAST WALL LIVING ROOM		10/21/08
LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	615	REPAIR/REPLACE	BASEMENT VENT PIPE RUSTED AND CRACKED REPLACE Y AT CHIMNEY		10/21/08

Data that is requested from the city of Minneapolis comes in the form of a Microsoft Excel spreadsheet. However, a few alterations must be made for the spreadsheets to be used as tables in ArcGIS. After these alterations are made, the spreadsheets will be imported into the geodatabase that contains all of the Lyndale parcels, survey information, and additional documents. This will help to keep things organized and in one centralized location.

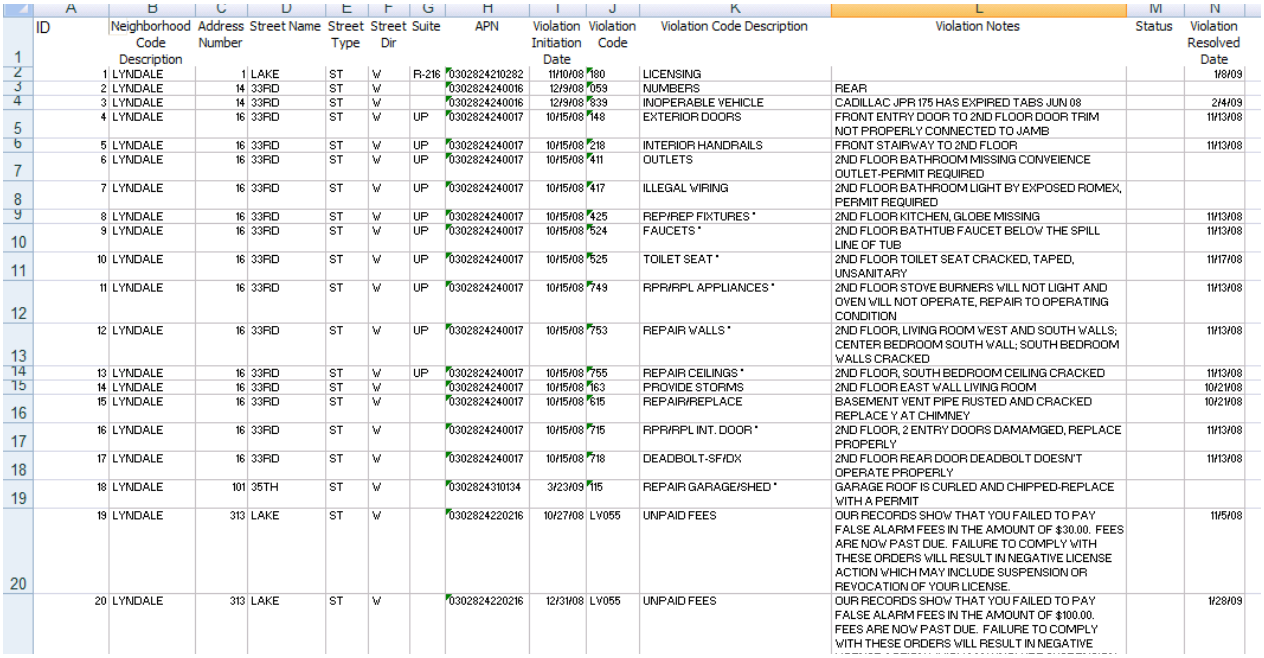
First, the top few rows must be deleted (red area shown above). Next, an ID field must be inserted into the first column and each row given an ID number. This can be done simply by typing '1' into the first row's ID and dragging that row's handle to the end of the column. To get a unique value for each row, use the 'AutoFill Options' and select 'Fill Series'. Third, at the end of the spreadsheet there are some unique characters (mostly '#' symbols) that need to be deleted (red area shown below).



											be removed from the back area or an administrative citation will be issued.	
453	LYNDALE	3545	BLAISDELL	AVE		0302824310179	12/3/08	EM404	ILLEGAL DUMPING			12/3/08
454	LYNDALE	3545	BLAISDELL	AVE		0302824310179	3/5/09	EM404	ILLEGAL DUMPING			3/5/09
455	LYNDALE	3552	1ST	AVE	S	0302824420103	3/30/09	839	INOPERABLE VEHICLE	PURPLE SUBURBAN IN BACK YARD-BROKEN REAR WINDOW-EXPIRED TABS PLATE-MN HAK 256 SEP 08		4/8/09
#######	- 1 -	######										

Other issues that need to be taken care of in the spreadsheets are illegal characters. By this I mean symbols such as *, #, $, @, etc. When converting these into the GIS database it causes an error and none of the records below one with an illegal character will transfer. So quickly go

through the notes section in each spreadsheet to make sure that they do not contain these characters. Also, another thing to note is that fields in GIS can only be up to 255 characters in length. Some of the notes sections in the spreadsheets are well beyond that. The GIS will simply cut off all characters beyond 255. Quickly review the notes section so that important information is not removed when converting. Below is a screenshot of a spreadsheet that is ready to be converted into GIS table and ready for analysis.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ID	Neighborhood Code Description	Address Number	Street Name	Street Type	Street Dir	Suite	APN	Violation Initiation Date	Violation Code	Violation Code Description	Violation Notes	Status	Violation Resolved Date
2	1	LYNDALE	1	LAKE	ST	W	R-216	0302824210282	11/10/08	180	LICENSING			1/8/09
3	2	LYNDALE	14	33RD	ST	W		0302824240016	12/9/08	059	NUMBERS	REAR		
4	3	LYNDALE	14	33RD	ST	W		0302824240016	12/9/08	339	INOPERABLE VEHICLE	CADILLAC JPR 175 HAS EXPIRED TABS JUN 08		2/4/09
5	4	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	148	EXTERIOR DOORS	FRONT ENTRY DOOR TO 2ND FLOOR DOOR TRIM NOT PROPERLY CONNECTED TO JAMB		11/13/08
6	5	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	218	INTERIOR HANDRAILS	FRONT STAIRWAY TO 2ND FLOOR		11/13/08
7	6	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	411	OUTLETS	2ND FLOOR BATHROOM MISSING CONVEIENCE OUTLET-PERMIT REQUIRED		
8	7	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	417	ILLEGAL WIRING	2ND FLOOR BATHROOM LIGHT BY EXPOSED ROMEX, PERMIT REQUIRED		
9	8	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	425	REP/REP FIXTURES *	2ND FLOOR KITCHEN, GLOBE MISSING		11/13/08
10	9	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	524	FAUCETS *	2ND FLOOR BATHTUB FAUCET BELOW THE SPILL LINE OF TUB		11/13/08
11	10	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	525	TOILET SEAT *	2ND FLOOR TOILET SEAT CRACKED, TAPED, UNSANITARY		11/17/08
12	11	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	749	RPR/RPL APPLIANCES *	2ND FLOOR STOVE BURNERS WILL NOT LIGHT AND OVEN WILL NOT OPERATE, REPAIR TO OPERATING CONDITION		11/13/08
13	12	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	753	REPAIR WALLS *	2ND FLOOR, LIVING ROOM WEST AND SOUTH WALLS; CENTER BEDROOM SOUTH WALL; SOUTH BEDROOM WALLS CRACKED		11/13/08
14	13	LYNDALE	16	33RD	ST	W	UP	0302824240017	10/15/08	755	REPAIR CEILINGS *	2ND FLOOR, SOUTH BEDROOM CEILING CRACKED		11/13/08
15	14	LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	163	PROVIDE STORMS	2ND FLOOR EAST WALL LIVING ROOM		10/21/08
16	15	LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	615	REPAIR/REPLACE	BASEMENT VENT PIPE RUSTED AND CRACKED REPLACE Y AT CHIMNEY		10/21/08
17	16	LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	715	RPR/RPL INT. DOOR *	2ND FLOOR, 2 ENTRY DOORS DAMAMGED, REPLACE PROPERLY		11/13/08
18	17	LYNDALE	16	33RD	ST	W		0302824240017	10/15/08	718	DEADBOLT-SF/DX	2ND FLOOR REAR DOOR DEADBOLT DOESN'T OPERATE PROPERLY		11/13/08
19	18	LYNDALE	101	35TH	ST	W		0302824310134	3/23/09	115	REPAIR GARAGE/SHED *	GARAGE ROOF IS CURLED AND CHIPPED-REPLACE WITH A PERMIT		
20	19	LYNDALE	313	LAKE	ST	W		0302824220216	10/27/08	LV055	UNPAID FEES	OUR RECORDS SHOW THAT YOU FAILED TO PAY FALSE ALARM FEES IN THE AMOUNT OF $30.00. FEES ARE NOW PAST DUE. FAILURE TO COMPLY WITH THESE ORDERS WILL RESULT IN NEGATIVE LICENSE ACTION WHICH MAY INCLUDE SUSPENSION OR REVOCATION OF YOUR LICENSE.		11/5/08
	20	LYNDALE	313	LAKE	ST	W		0302824220216	12/31/08	LV055	UNPAID FEES	OUR RECORDS SHOW THAT YOU FAILED TO PAY FALSE ALARM FEES IN THE AMOUNT OF $100.00. FEES ARE NOW PAST DUE. FAILURE TO COMPLY WITH THESE ORDERS WILL RESULT IN NEGATIVE		1/28/09

Now, a geodatabase needs to be created to import all of our data into. To do this, open ArcCatalog. On the left-hand side (called the Table of Contents) locate where you want to store the data (probably on the server in the Problem Properties folder). To the right of the Table of Contents all of the items located in the Problem Properties folder should be listed. Next, click File → New → File Geodatabase. A new file geodatabase will be added to that folder. Change the name from "New File Geodatabase.gdb" to something appropriate (eg. PP_2009.gdb). A naming convention should be developed that is used by everyone involved in the project. This will help eliminate confusion when multiple people are involved in the project. Now, data can begin to be added to the geodatabase.

Importing tables into the geodatabase. Once the tables have been cleaned up, you are going to want to import them into that year's survey geodatabase. This is done by opening ArcCatalog, locating that year's survey geodatabase, right-clicking on it and selecting "Import"→ "Table (single)…". A menu will pop-up asking for "Input Rows". Click on the folder to the right of Input Rows and locate the table to import. Do not change the output location, but give a name for the "Output Table". Leave everything else as is, and hit OK. The table should be added to your geodatabase.

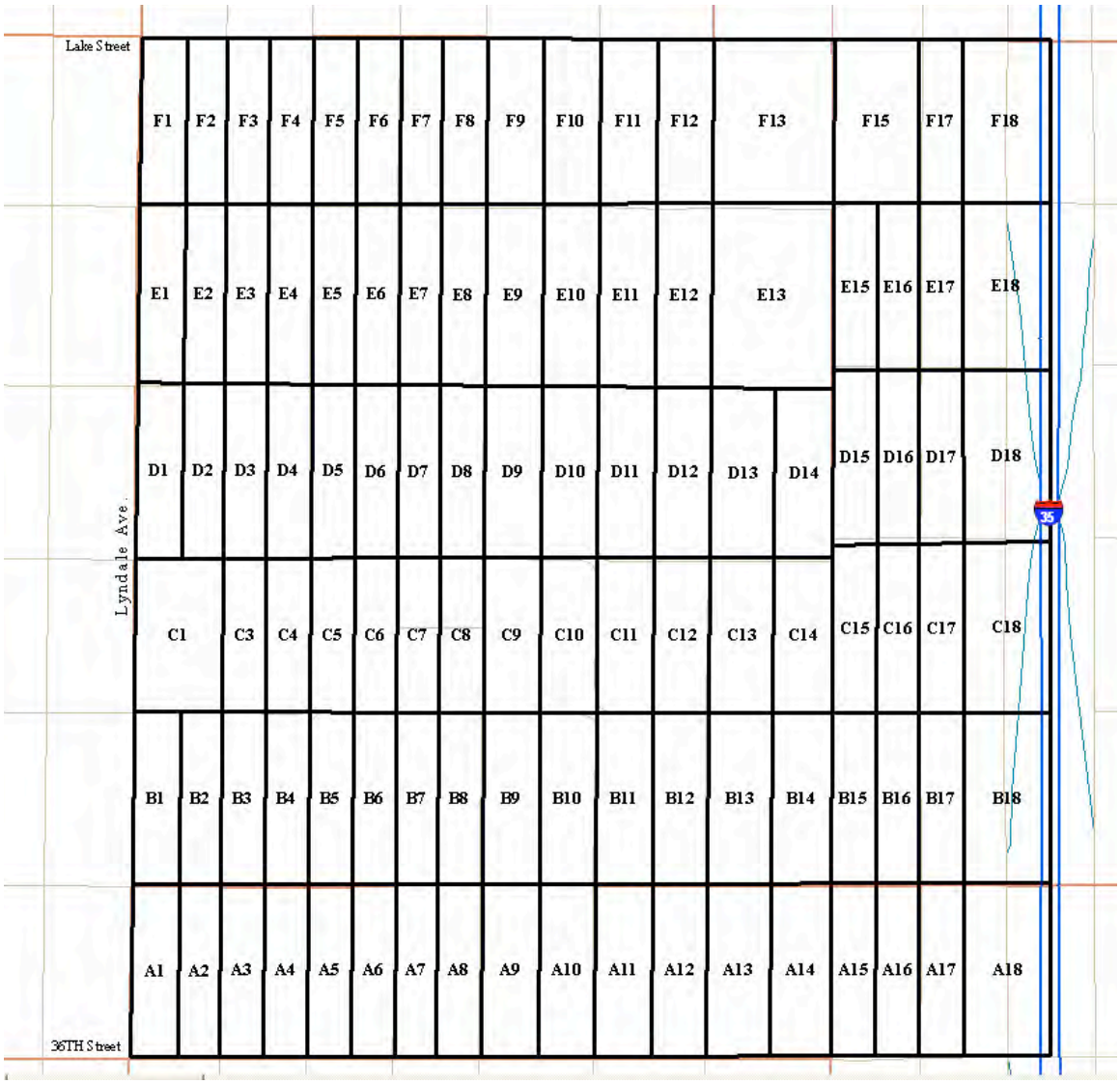
Foreclosure Data Received from CURA

At this time I have not received the foreclosure data from Jeff Matson. If asked, he should be able to send monthly foreclosure information in GIS format specifically for the Lyndale neighborhood. If received monthly, I would merge the existing foreclosure dataset with the new one received each month from Jeff. This will allow for easy tracking and require less files and disk space. Files can be merged using the 'Merge' tool in the *Data Management Tools→ General → Merge*. Having one single foreclosure dataset will make analysis of foreclosures in the neighborhood over time much easier than working with multiple datasets.

VII. CREATING TABLES, SURVEY, & DATABASE

Creating the LYN PID's and GRID

Parcel data was received from CURA. Appropriate metadata for the parcel data is accompanied in the Problem Properties folder. To better understand fields and abbreviations in the dataset, familiarize yourself with the metadata. New parcel data should be acquired prior to conducting the survey each year. This keeps parcel information (ownership, taxes, etc.) relatively up-to-date. Import the new parcel data into that year's geodatabase. This is done similarly to importing tables. However, instead of selecting to import a table, you select "Feature class (single)…". Similarly, a menu will pop-up. Select the new parcel data layer as the Input Feature Class and give the Output Feature Class an appropriate name. Leave everything else as is, and hit OK.



The grid was created specifically to fit the Lyndale neighborhood (See grid setup above). The grid scheme begins in the southwest corner of the neighborhood on Lyndale and 36th. Rows range from letters A-F and columns range from 1-18. The very southwest corner has a grid number A1. The grid cell to the east is A2, and to the north B1, and so on all the way up to F18.

Parcels that cross grid boundaries are assigned to the block to the farthest left (West) in which that parcel is located. For example, if a parcel is located in both block A1 and A2 it would be assigned to block A1 even though it is also located in A2.

Once you receive yearly updated parcel information, the LYN PID's must be assigned to each parcel. This takes a couple of steps in ArcGIS.

1. Add both the GRID layer and the newly received Parcels layer to ArcGIS

2. 4 Fields need to be added to the Parcels layer (BlockRow, BlockColumn, AddNum-the address number, and LYNPID)

   To add a field right-click on the Parcels layer and select "Open Attribute Table"

   Click the "Options" menu in the right hand corner and select "Add Field"

   Name it, select 'Text' (even for numbers because we are going to bring all of these fields together and they must be the same type to do so) as the Type and give it a length (the length is the maximum number characters that field can contain. For example, when creating the BlockRow field I would give it a length of one, as it is only going to contain one letter. BlockColumn-2, AddNum-4, and LYNPID-8)

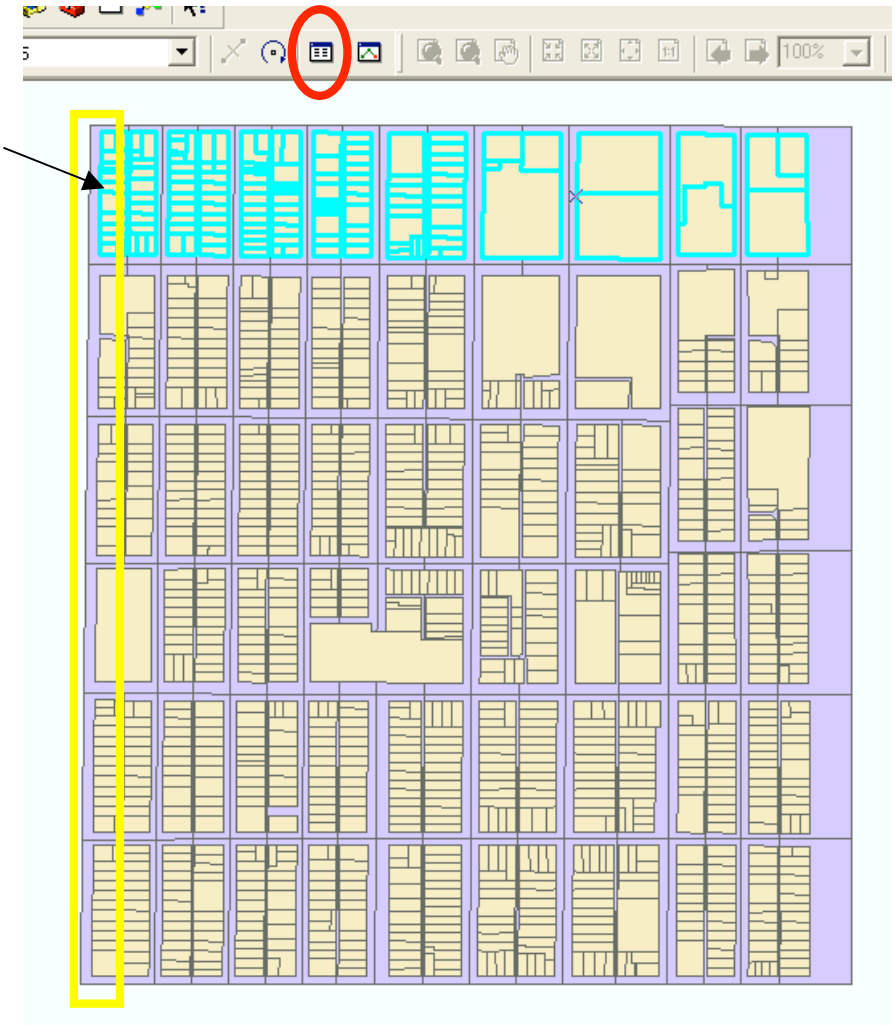
   Now, we need to create the values for the BlockRow and BlockColumn fields.

3. Click the dropdown in the 'Editor' toolbar and click to 'Start Editing' (If the Editor toolbar is not displayed click 'View'→ 'Toolbars' → 'Editor')

   First, you need to set the Parcels layer as the only selectable layer. To do this, click the 'Selection' dropdown menu and then 'Set Selectable Layers'. Click so that there is only a checkbox in the Parcels layer.

   Next, select the 'Edit Tool'  located on the Editor Toolbar

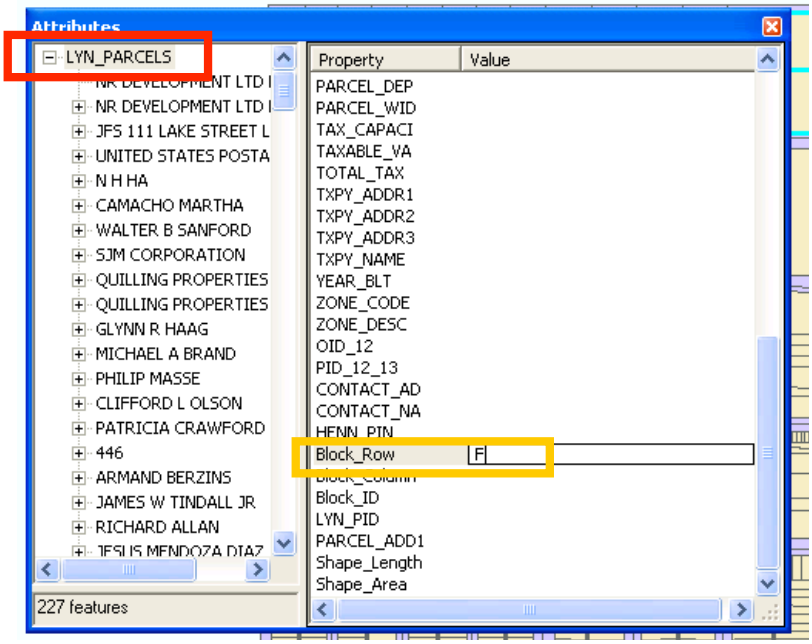
   Using the 'Edit Tool' click and drag a box around all of the parcels that are in a single row or column. For example, below all of the parcels located in row F were selected (see arrow below).



Now, you need to add to the selected parcels that they are located in row F. To do this, click the 'Attributes' button (circled in red below). This will make an attributes window pop-up (see below). On the left hand side of the attributes window will be a list of all the parcels that are selected. Click the very top name in the left pane. It will be the name of the Parcels layer (red square below). Finally, under the BlockRow field that was added type in the letter for the row and hit enter. In this example it is 'F' (see orange box below). **NOTE: Warning, do not type values in any other field than the ones that you created. This could dramatically alter the data.**

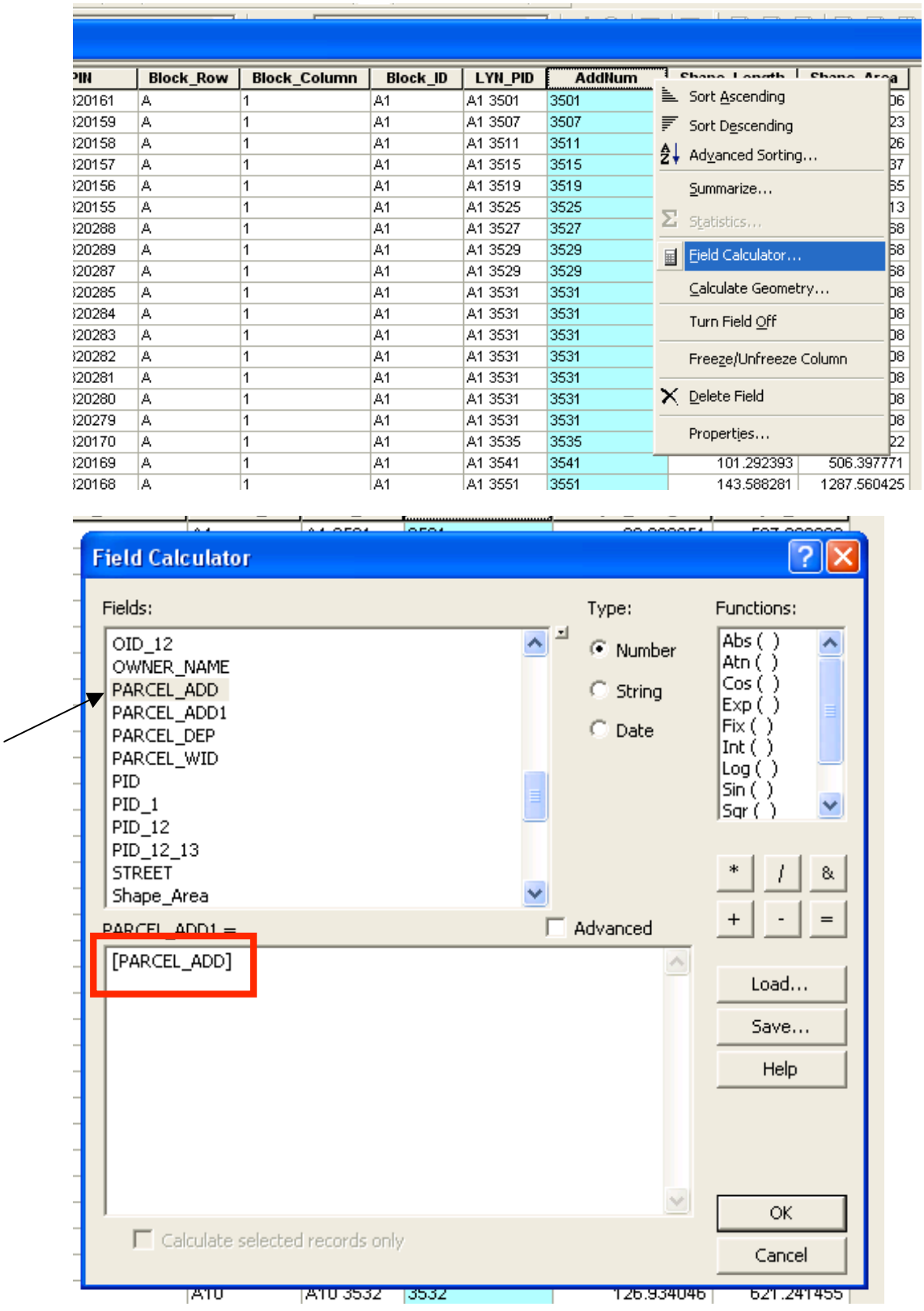
Go through these steps for each row (A-F) and then repeat the steps for the BlockColumn. The only difference is that you select the parcels in a column (such as the yellow box above would select all parcels in column 1) and not the row, and enter in the column number (1-18). Also, make sure to enter it into the BlockColumn field and not the BlockRow field. When finished, click the 'Editor'

button on the Editor Toolbar and select 'Stop Editing'. It will ask if you would like to save your edits and select Yes.



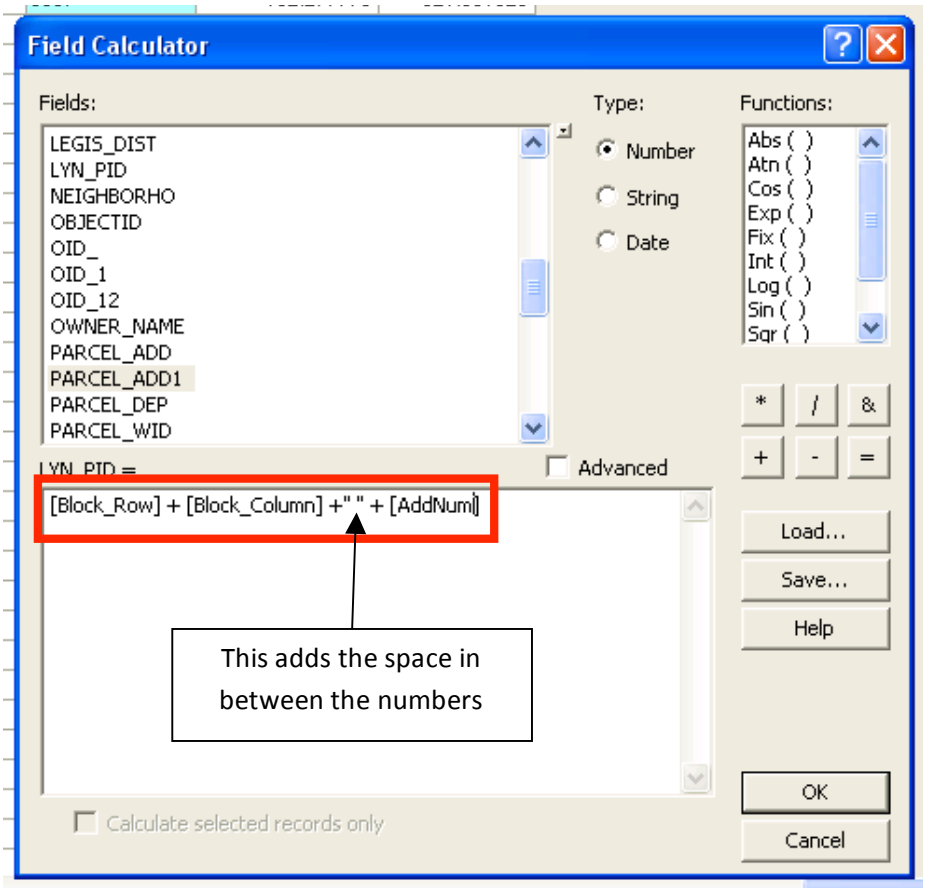
4. Once again open the Parcels layer Attribute Table. To finish creating the LYNPID the house or address number is needed, which will be the values in the AddNum field. For example, in 3501 Lyndale Ave S, we are interested in just getting 3501 into the AddNum field. There should be a field named something like Parcel_Add that contains these values for each parcel. This makes it easy to calculate our AddNum field as they are the exact values we want, but we want them to be text NOT numbers, which is why we created the AddNum field as a text type.

   Right-click at the top of the AddNum field and select 'Field Calculator' (see below). Select 'Yes' that you would like to continue. Then, the field calculator will open. Say the numbers we want are in a field Parcel_Add we simply double-click that field in the Fields window (arrow below) at the top of the calculator. It would look something like the second image below (red square) and hit OK. This will calculate the field.



5. Finally, the LYNPID's can be calculated. Again, use the 'Field Calculator', but this time right-click on the LYNPID field that you created previously and open the

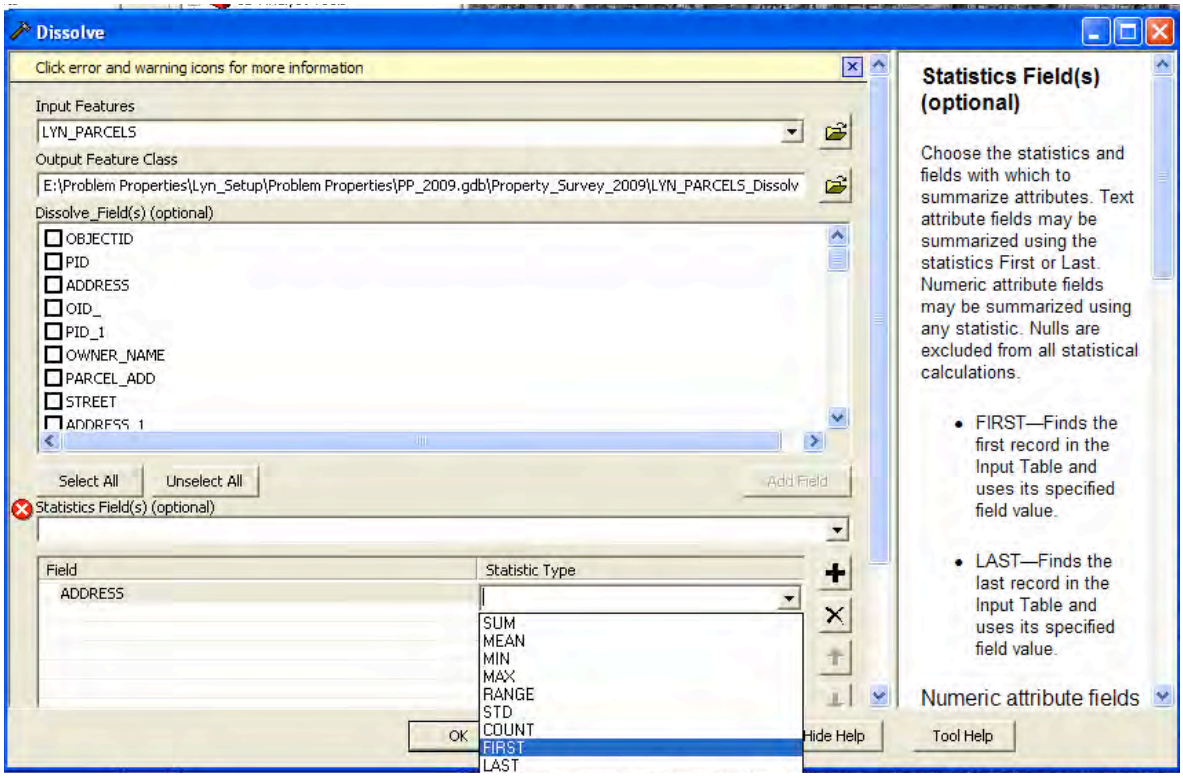
calculator. Then, we want to ADD the BlockRow, Block Column, and AddNum fields together to create the LYNPID. Also, we want a space located between the row/column combination and the AddNum. This helps for readability. Below is an example of what it should look like, or at least similar (field names may be a little different). Click OK.



For completing the survey we want to dissolve the LYNPID's so that there is only one ID per parcel. As it currently stands, one parcel may have multiple owners, such is the case for condos or some commercial properties, which means there may be 10 parcels with a LYNPID of A1 3531. For completing the survey we are only interested in completing one survey to represent A1 3531. To fix this we need run a dissolve, which keeps all of the unique LYNPID's and removes duplicates.

There is a tool called 'Dissolve' that will complete this function for us. It is located in the *Data Management Tools* → *Generalization* → *Dissolve* path. Add the parcel layer as the Input Features and specify the name and location for the Output Feature Class. For the Output Feature Class save it in the 'garbage.mdb' in the Problem Properties folder and specify a name. This file is only temporary, but needed to import the table into the Access database. It is crucial that you save it in the 'garbage.mdb' otherwise it will not be able to be brought into Access. Select the

LYN_PID for the Dissolve_Field and ADDRESS for the Statistics Field. You have to select a Statistic Type, and either First or Last will work. Leave the rest as is. Click OK.



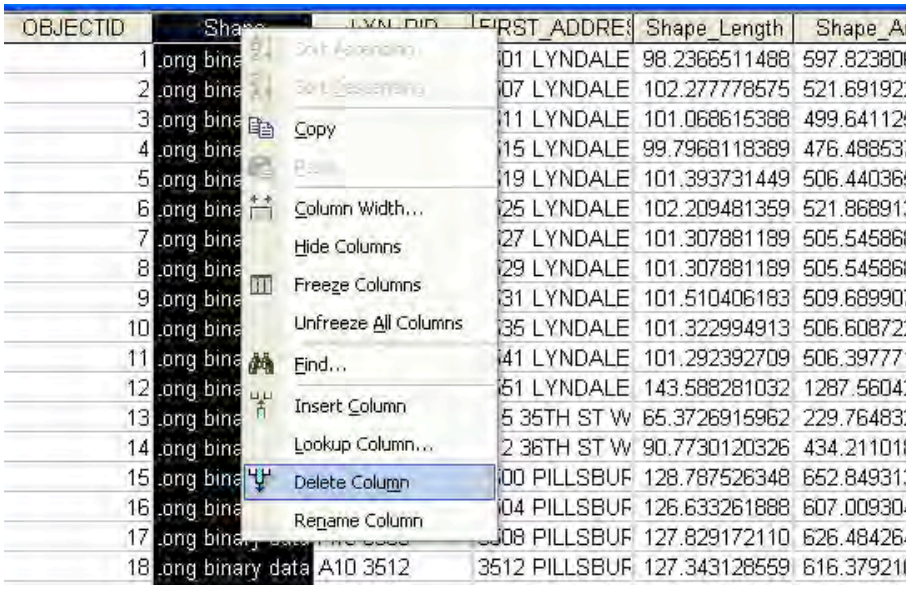
Once the Dissolve runs the dataset should look exactly the same as it did previously, however the attribute table will look different. It will only contain the LYN_PID and Address fields, instead of all the other fields it contained previously. Also, there will only be one parcel per LYN_PID and Address. All we are interested in is the table for the survey. This table will be used to link back to the original parcel layer.

Getting Parcel Information into Access tables

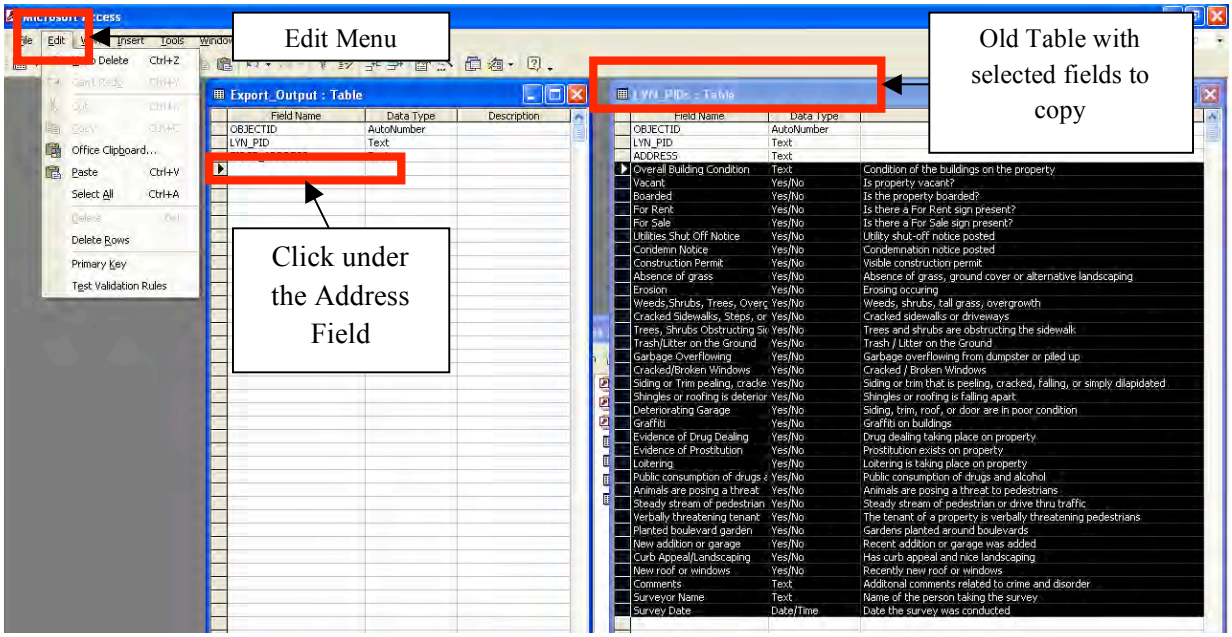
Each year, either a new database or tables will have to be added to the existing one for the newly updated parcel information (that is assuming that new parcel information is obtained). I would suggest a naming scheme specifying the year for each survey. I would recommend having one database with tables representing parcels for each year. This will eliminate having to create a new database connection year after year with the GIS.

To add the LYN_PID with addresses table to the Access database, simply select 

, Import Table, locate the LYN_PID table in the garbage.mdb, select the very top table and hit OK. This added the table to our database. Open the newly added table. We are only interested in keeping the OJECTID, LYN_PID, and address field, so go ahead and delete the others by right clicking the fieldname and hitting Delete Column.



Next, we want to add all of the survey items that we would like to be entered into the table. This can easily be done by opening both the previous years Problem Property table and the new one in Design View. In the previous years table select all of the fields you want to copy over to survey each property (example below selected from Overall Building Condition to Survey Date). Select the Edit menu and hit Copy. Next, go to the new table and click under the Address field so that the cursor is in an empty field. Again, go to the Edit menu and click Paste. All of the fields that were copied from the previous table have been added to the new table. **VERY IMPORTANT:** Make sure that all of the fields in the new table have the <u>SAME EXACT</u> name as the old table. The address field may need to be changed. This will make life easier in the steps to come. Close the new table and click Yes to save the changes. And Yes, Yes.

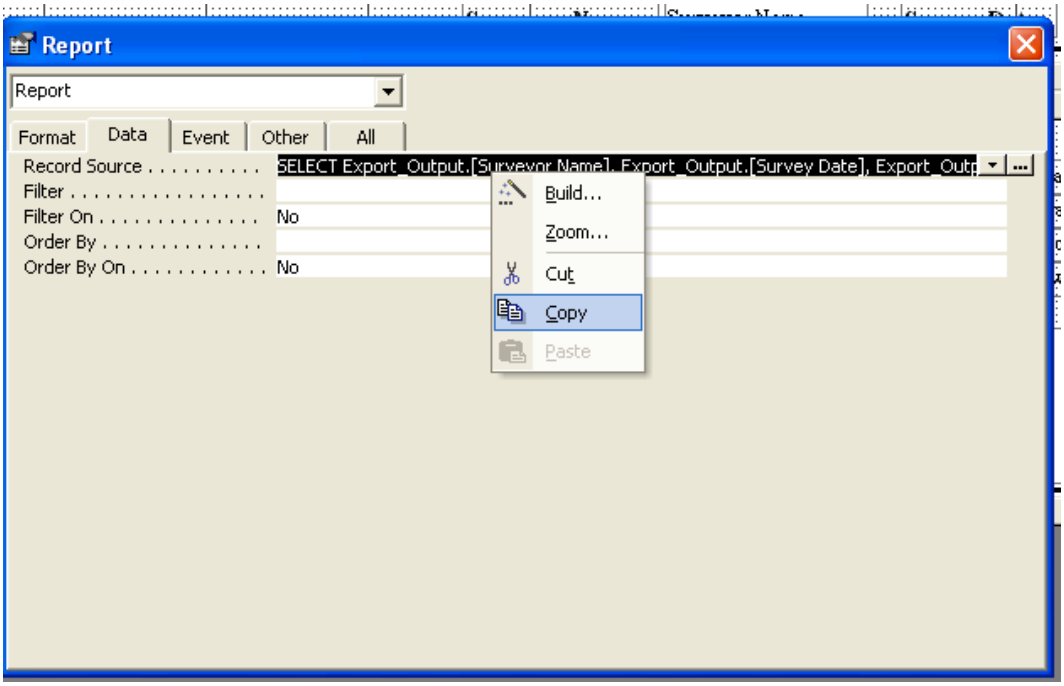


Creating the Report for the Neighborhood Survey

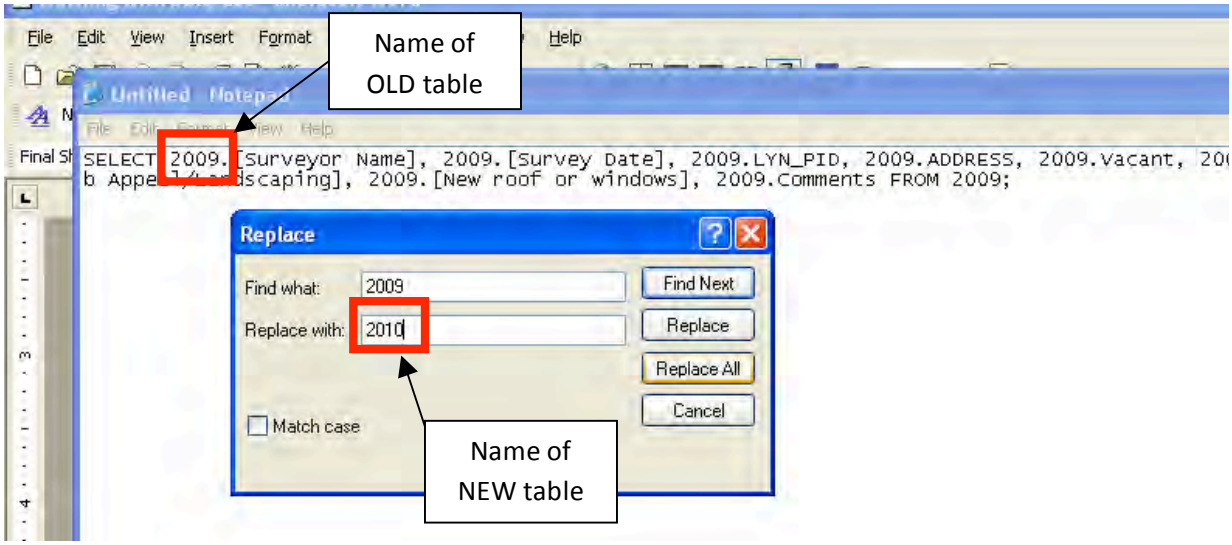
Similarly to having to re-create the parcels table each year, the report will need to be updated so that it is based on that years parcel information. This is a simple couple step process, given the same report is used from the previous year. Open the database containing the previous year's report. Copy the report by right-clicking the report and clicking Copy from the menu. If using the same database from previous years, and are just building year after year, simply right-click below the copied report and click Paste. Give the new report a proper name (I recommend something short that also indicates the year relating to that report).

Open the new report in Design View. If satisfied with the layout, all that is needed to change is the source data. As of right now, it is using the OLD parcel information for creating the report.

To make it use the NEW parcel information click the *Properties*  button on the top menu. The report menu will open. The *Record Source* contains an extremely long SQL statement that needs to be altered for our new table. To make it easier, I recommend copying and pasting the entire thing in Notepad to make the changes. This can be done by selecting the entire string, right-clicking it, and clicking Copy (When opening the report Properties it should automatically have the entire things selected, but make sure to double-check). Then, go into Notepad and click Paste. NOTE: Make sure that the entire thing is copied otherwise when you paste it back into the report, it will NOT create the report.



In Notepad, in the Edit menu, click Replace… We want to replace all of the times this expression calls on the OLD table and replace it with the name of the NEW table. In the example below, the OLD table containing the parcel information was named '2009'. So, in 'Find what:' I would type 2009, and 'Replace with:' '2010' which would be the name of the NEW parcel information table that we created previously. This expression is spelling and case sensitive, so make sure that whatever name that you gave the table, it is typed the same way here. Another note; avoid naming the tables the same as any of the fields otherwise when replacing they will get replaced and the report won't work. Click 'Replace All' and Notepad will automatically replace ALL instances of the OLD table with the name of the NEW table. Finally, copy and paste the new Record Source from Notepad back into the new report in Access. Close the report Properties box, close the report, and click Yes to save the changes. Test the newly created report by opening it in Print Preview. A report ordered by Block ID, based on the NEW table should have been created.



The sole purpose of creating the report is that it functions as the survey when printed off. The report is designed in such a way that it groups parcels by Block ID. This way volunteers or staff can simply grab a Block ID: A11 for example and walk up block A11. Most parcels should be in order of house number as well to create a nice linear flow to the survey. However, parcels at the end of blocks may not be ordered as nicely.

Entering Survey and Complaint Data into the Database

The table for the surveys in the database is set up to follow the printed version of the surveys. Each parcel is a row in the table. Every checkbox on the survey is a column in the table. The table and surveys are sorted in the same way. First by their block ID, then by their property number. This removes the need to be going back and forth.

Some shortcuts when entering data:

Use the ‘Tab’ key to quickly move across cells horizontally.

Use the ‘Space’ bar to check a box, hit it again to uncheck the box

For the Overall Building Condition field, type in the number and hit ‘Tab’. It automatically completes the rest.

If someone new completed a survey, enter them into the values for the ‘Surveyor Name’ field. This will allow for quicker entry of their name, as you will only need to enter the first letter or two of their name.

> To enter a new name into the ‘Surveyor Name’ field, open the table in Design View. Find the ‘Surveyor Name’ field and in the ‘Lookup’ tab find ‘Row Source’. There will be a few names listed already. Simply add the name of the new person to this list. Make sure that it is in the same format that the others are. For example, “John Doe”;”Jane Doe”;”John Peters” etc. Then, go back to Datasheet View and continue to enter data. The new surveyor name should be part of a drop down list and all that you need to do to enter their name in this field is type the first letter or two and hit the ‘Tab’ key. Note: You may need to type in more of their name if similar or same names exist in the list.

To see a detailed description of each field in the survey go to the Survey Guidance section.

Explaining the Complaints table:

The complaints table was developed to continuously record problems. These complaints may come from phone calls, public meetings, etc. This table will help to develop a better understanding of which properties are truly causing the most disruption in the neighborhood.

The person entering data can look up any address in the neighborhood using the dropdown list in the ADDRESS field. Select the address and record the LYN PID associated with that address. The LYN PID is the set of letters and numbers to the right of the address. Enter that ID into the LYN PID field.

Complaint Type:

> Two complaint types are available: Grounds and Structure Problems and Public Safety Issues. Simplifying the types of complaints will help to map the problems. Some complaints may be both. In this case create one complaint that describes the Grounds and Structure Problems and another that describes the Public Safety Issues. A property may contain any number of complaints.

Complaint Description:

This is where each complaint should be described in detail. Be as detailed as possible, but the field can only contain 255 characters. This should be plenty of space, but make sure you get everything that needs to be said in 255 characters.

Complaint From:

The person or contact that made the complaint. Make sure that the person making the complaint is comfortable with storing their name with this complaint. Otherwise, mark it as anonymous.

Complaint Date:

The date that the complaint was made. Must be in this format: MM/DD/YYYY.

Connecting the Access Database to the GIS

The Access database should already be connected to ArcMap, but if it is lost here is how to re-connect.

1. Open ArcCatalog
2. On the left hand side, in the Table of Contents, click *Database Connections*.
3. Double-click *Add OLE DB Connection*.
4. Select *Microsoft Jet 4.0 OLE DB Provider* (try others if this doesn't work). Click Next. Under *Select or enter a database name:* locate the Problem Property Access database. Leave everything else as is.
5. Click OK. Give the database connection an appropriate name.

What this database connection allows us to do is whenever changes are made in the Access database; they will automatically be seen when relating to it in ArcMap. This allows us to always be working with the most current data from the Access database.

VIII. ANALYZING AND MAPPING THE DATA IN ARCMAP

Data Layers

As it currently stands the following GIS layers and tables are available to be used for analyzing and mapping data:

GIS Layer	Information	Use
Roads	Contains roads located within the Lyndale neighborhood and beyond. Taken from ESRI data CDs	Primary use is as providing reference information to one's location.
Parcels	Contains information and locations of each parcel in the neighborhood. Two parcel layers were received from Jeff Matson. One from the county and one from the city of Minneapolis.	Layers contain a wealth of information that can be used. Contains property ID's needed to join and relate data, zoning information, ownership, etc.
Grid	Created by Kody Thurnau specifically for the Lyndale neighborhood.	Designed for conducting survey, but may also be used to aggregate data based on the block level.
Foreclosure (once received)	Contains monthly foreclosures in the neighborhood.	Will allow to provide assistance for homeowners.
Tables	**Information**	**Use**
Request for Service(RFS)	Requests for services from the city of Minneapolis.	Table can be used in a relate with the parcels layer to identify what RFS have occurred at specific properties.
Violations	Violations cited by the city of Minneapolis to specific residents/landlords of properties.	Table can be used in a relate with the parcels layer to identify what violations have occurred at specific properties.
Rental Licenses	Rental licenses located in the neighborhood.	Table can be used in a relate with the parcels layer to identify where rental units are located in the neighborhood.
Complaints	Table that is continuously being developed by LNA as complaints are received by staff regarding properties (stored as an Access database table).	Can be used in a relate with the parcels layer to identify locations of the complaint.
Survey	A yearly visual survey of each neighborhood property (stored as an Access database table).	Can be used in a join with the parcels layer to perform analysis based on data received from the visual survey.

This is by no means an exhaustive list of the types of data that can be used for analyzing problem properties; however, it provides a starting point for the neighborhood to begin analyzing properties.

Map Setup

A previous map document with all joins and relates has already been set up, but as new maps (years) are constructed these steps will need to be completed for data analysis and mapping.

Joins and relates are used when you want to link two or more tables to one another. This is extremely useful when you have numerous datasets from a number of sources and want to link them together. ESRI's ArcGIS Desktop Help explains it best:

> ArcMap provides two methods to associate data stored in tables with geographic features: joins and relates. When you join two tables, you append the attributes from one onto the other based on a field common to both. Relating tables defines a relationship between two tables—also based on a common field—but doesn't append the attributes of one to the other; instead, you can access the related data when necessary (ESRI ArcGIS 9.3.1; joins, described).
>
> **Joins versus relates**
> Follow these general guidelines when choosing between joins and relates on your data:
>
> - You'll want to join two tables when the data in the tables has a one-to-one or a many-to-one relationship.
> - You'll want to relate two tables when the data in the tables has a one-to-many or many-to-many relationship (ESRI ArcGIS 9.3.1; joins, described).

Open 'A new empty map' in ArcMap.

To add data to a map, click the Add Data button  , locate the databases containing all necessary data, and click Add.

> Add the parcel data containing the LYN_PID to an empty map. Additionally, add foreclosure, streets and aerial imagery if desired. To add aerial imagery, click the Add Data button, 'Look in:' *GIS Servers*, double-click *LMIC WMS server (aerial photography) on geoint.lmic.state.mn.us* → *LMIC WMS server (aerial photography)* → *LMIC WMS server (aerial photography)* → *Metro area* → *2008 color NGA* (This is the most recent imagery at the time of this report. Also, add older imagery if you are interested in historical information.). What this is doing is connecting to a web mapping service hosted by the Land Management Information Center (LMIC), which provides on the fly imagery without having to actually download the data making the process speeds much faster.

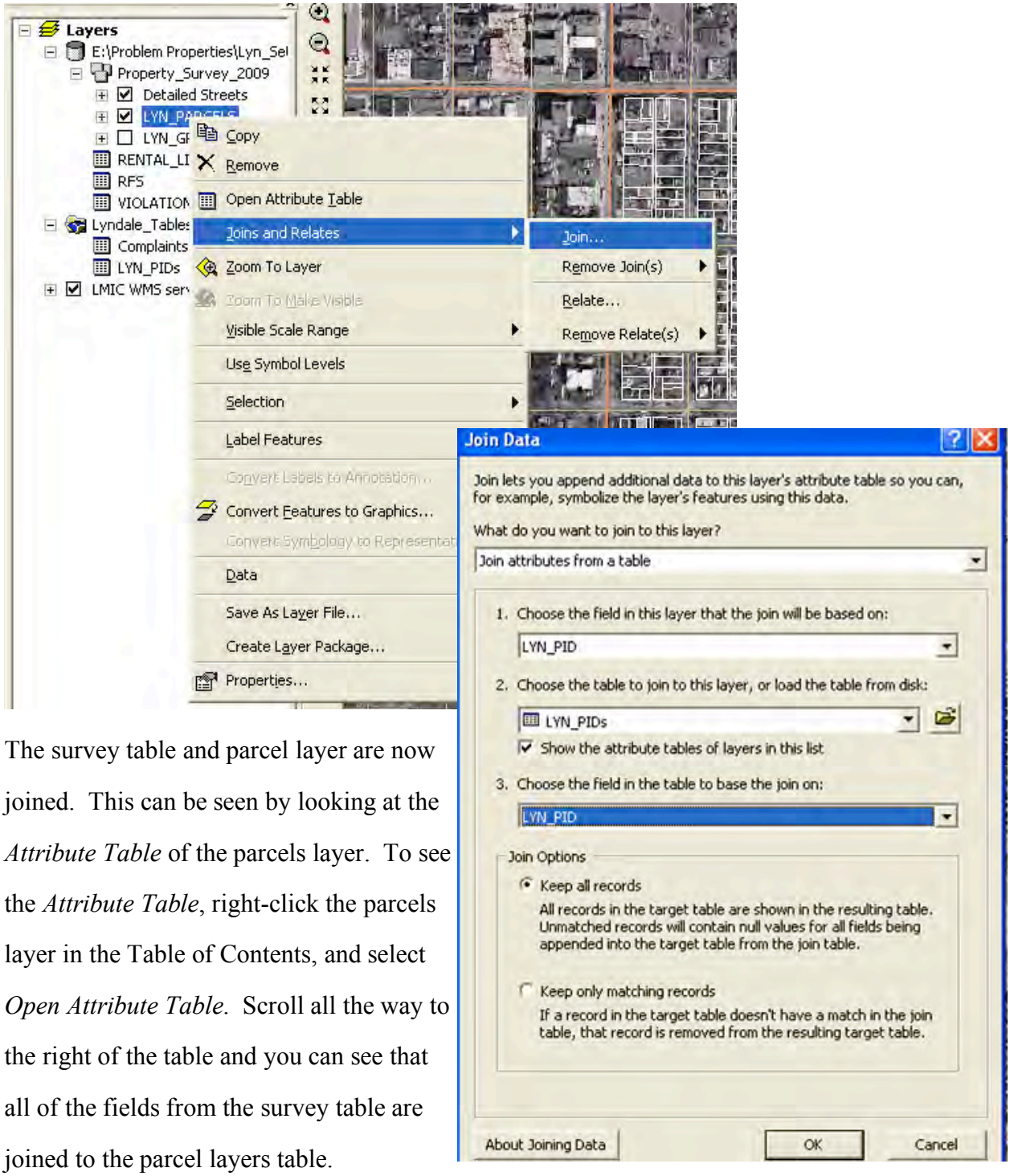
Add the tables containing data from the city of Minneapolis. Also, add the complaints and survey tables from the Access database (These are added to map the same as all other data. They are just located in Database Connections → and then whatever name the connection was given).

All of the data that is added to the map document should be listed on the left-side in the Table of Contents.

Save the map document in a location next to the geodatabase (use a recognizable naming scheme eg. PP_2009). This protects you from having to repeat these steps every time.

Now, all of the joins and relates need to be made between the parcel data and the tables from the city, survey, and complaints (It is likely that the foreclosure data will be able to be joined to the parcels as well. However, at the time of this report I didn't have the data). The only table that will be a join is the table from the surveys. The rest will be relates. The reason being that joins work with either one to one or many to one relationships. For the survey each parcel was only surveyed once, but a parcel may have multiple owners, giving it a many to one relationship. Relates work with one to many relationships. For the rest of the tables, one parcel may have many items in the related table. For example, parcel *F15 1* may have 13 requests for service and 6 violations.

To create a join, right-click the parcels layer in the Table of Contents, place the mouse over *Joins and Relates*, and select *Join* (see below). A *Join Data* menu will open. We want to join the parcels layer to the survey table based on the LYN_PID and keep all of the records. The menu should look similar to that below (survey table may be named differently, but should contain the same field to base the join on). Click OK

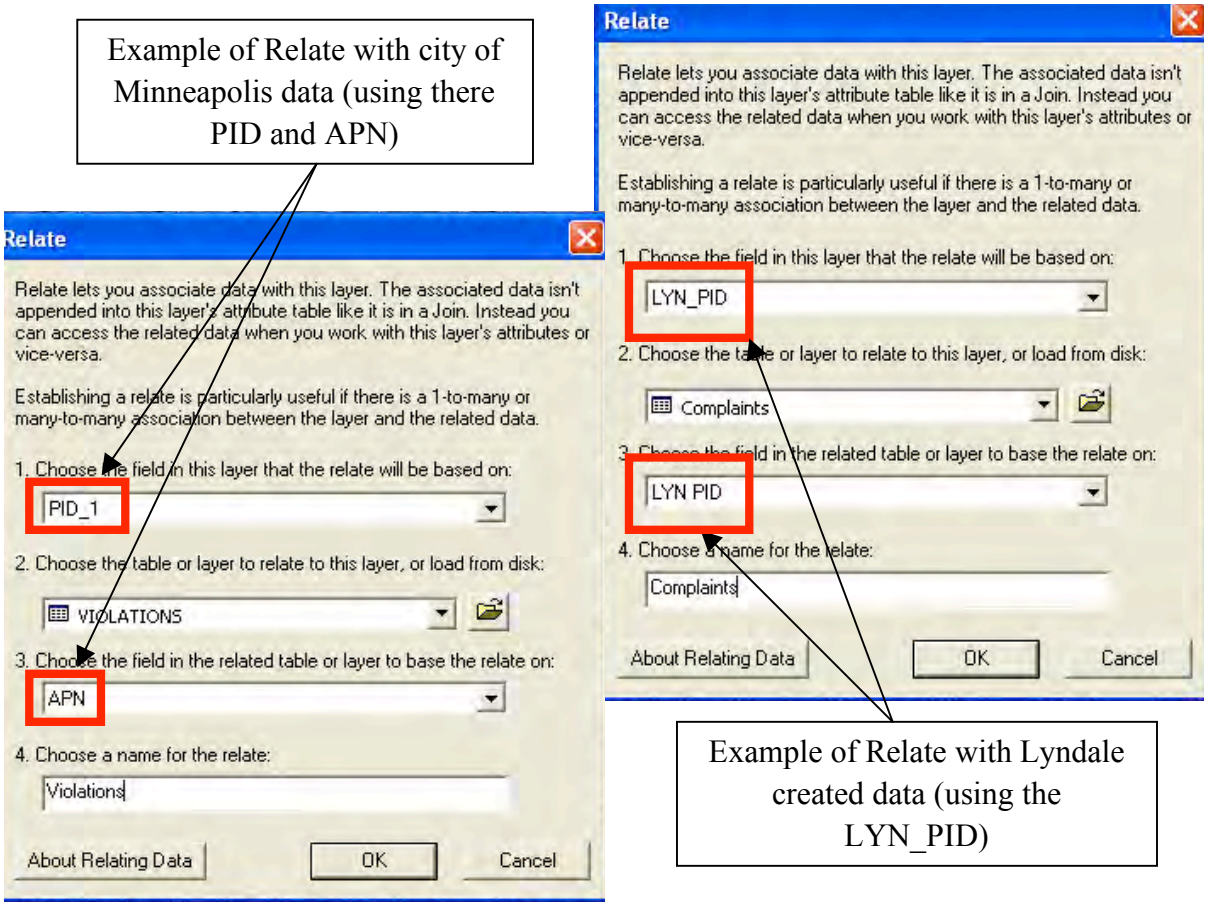


The survey table and parcel layer are now joined. This can be seen by looking at the *Attribute Table* of the parcels layer. To see the *Attribute Table*, right-click the parcels layer in the Table of Contents, and select *Open Attribute Table*. Scroll all the way to the right of the table and you can see that all of the fields from the survey table are joined to the parcel layers table.

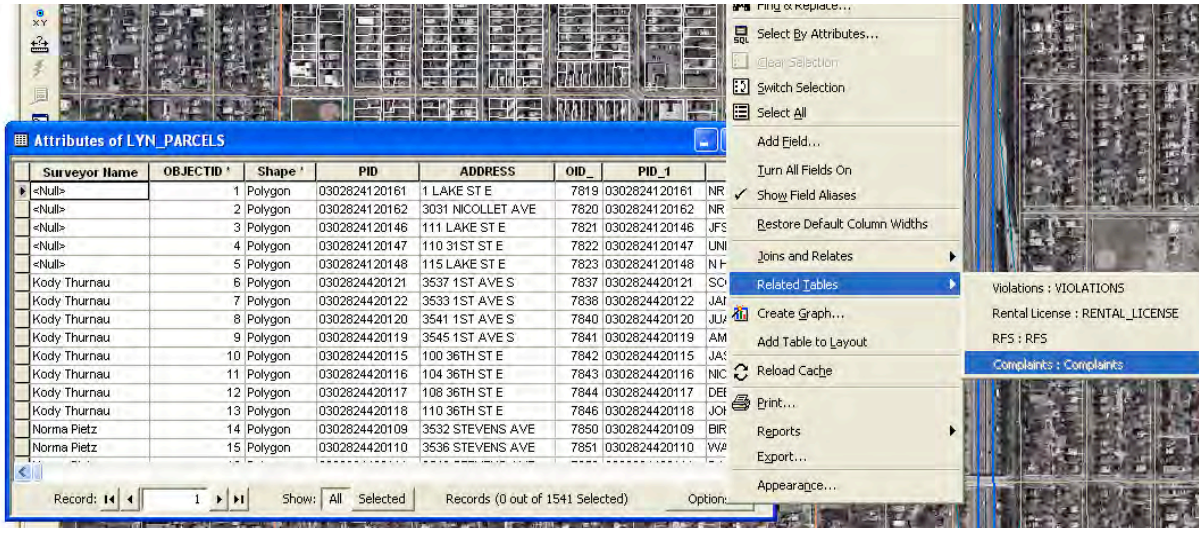
A join like this can be completed multiple times on one layer with multiple datasets. All that is needed is a key such as the LYN_PID to connect the two tables.

To relate two tables in ArcMap is similar to creating a join. Right-click the parcels layer, place the mouse over *Joins and Relates* and select *Relate*. Again, a menu will open. Similarly to a join, select the field to base the relate on (in our case either the PID or

LYN_PID depending on which table relating to), the table to relate to (either the Complaints, Rental License, RFS, or Violations tables), and again either the APN (which is the city of Minneapolis's name for property ID's) or LYN_PID for the field from the related table to base it on. Finally, name the relate something appropriate (eg. 'Complaints' if we are relating to the complaints table). It should look similar to the examples below. Create a relate between the parcels layer and all of the tables by repeating these steps for each (NOT the survey table as that was a join).



To see that the relates have been made open the Attribute Table for the parcels layer, click *Options* in the lower right-hand corner of the table, place the mouse over *Related Tables*, and the table that you created the relate to should be listed with the name you gave it. See below.



The data being used this year (2009) will contain 1 joined table (possibly two depending on foreclosure data) and 4 related tables. Three related using the city property ID (PID/PID_1 & APN) and one using the LYN_PID (Complaints table).

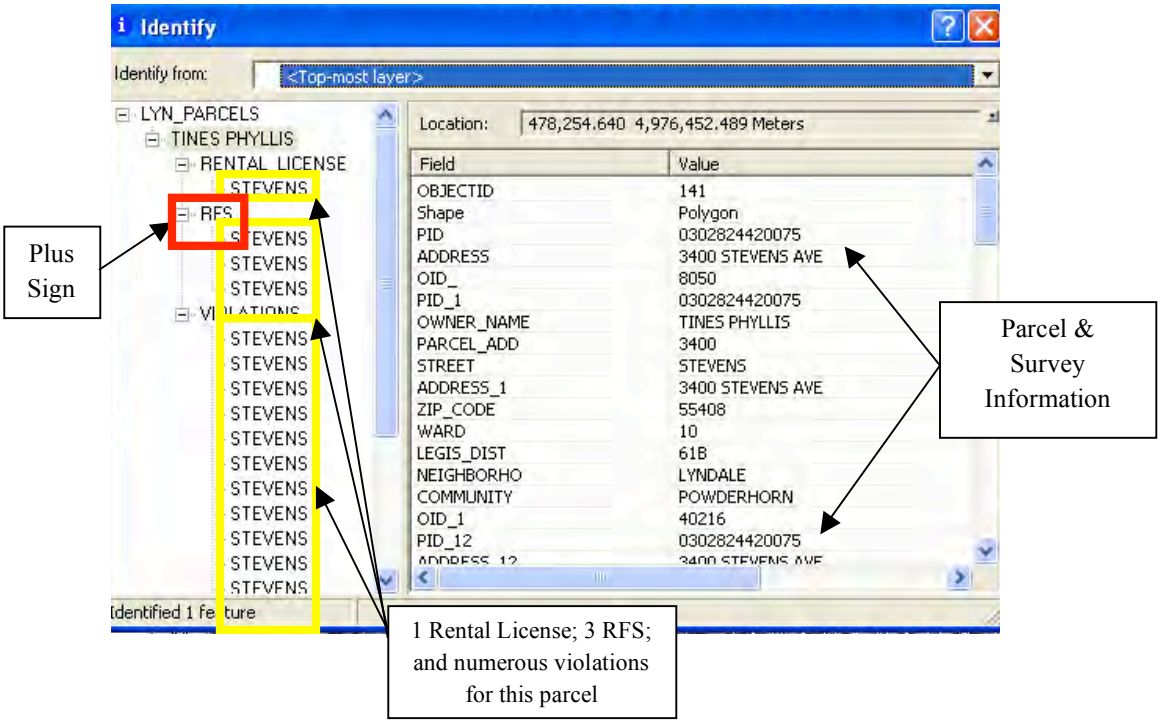
Make sure that when you create a join or relate to save the map document. This will save the joins and relates and you will not have to repeat these steps each time you open the map document.

Analyzing and Displaying the Results

Now that all of the data is set up, it can begin to be analyzed. There really is no single way to do this, and depending on which problem is being looked at, it will likely determine how you analyze the data. The next couple of paragraphs will show examples of how the data can be analyzed.

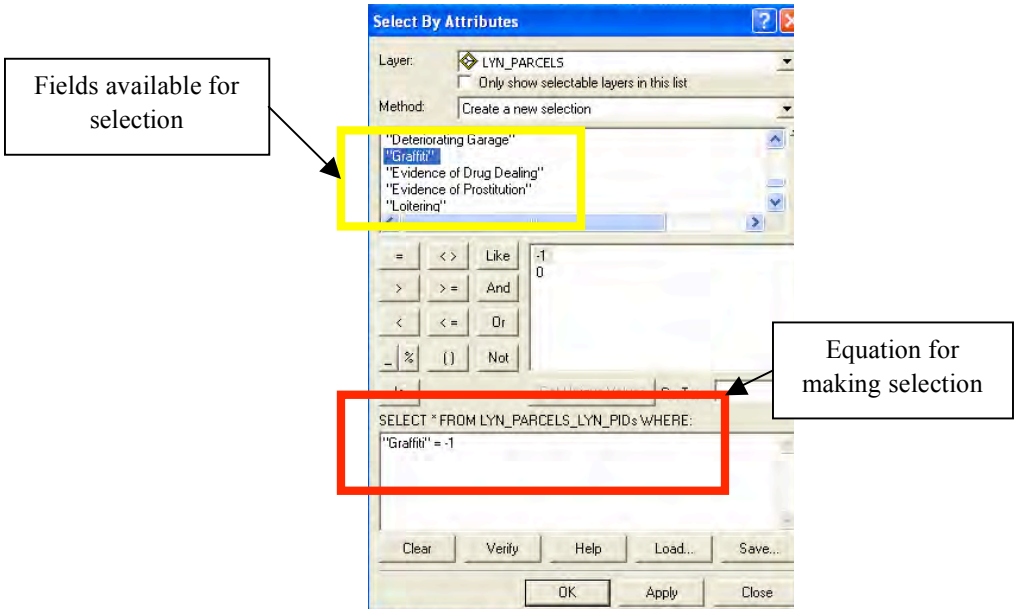
Example # 1

The first example is simple and straight-forward. Let's say you are just interested in knowing the basic parcel and survey information. To do this; simply select the *Identify* tool, then click inside the parcel you are interested in. All of the information for that specific parcel will be displayed in a pop-up box. The initial information that is displayed will be the parcel and survey information. If there is related information (rental licenses, RFS, or violations) attached to this parcel, if you click the '+' sign the related information will be displayed and the '+' will become a '-'. If any of these tables contain related information to that parcel, it will be displayed. To view related information you can click on each record that is related (See below). Some parcels will contain related information, while others will not. An assumption may be made that the more related information to a parcel, the bigger the problem that property is.



Example # 2

The next example provides another way to analyze the data. Say you want to know where all the graffiti exists in the neighborhood. To do this, use the 'Select by Attributes'  . When this button is selected, a menu will pop up. The layer that we want to analyze is the Lyndale parcels layer. We want to 'Create a new selection, double-click "Graffiti", hit '=', *Get Unique Values* (it will give you '-1' and '0' where '-1' means graffiti is present), double-click '-1'. The final menu should look like this:



'-1' and '0' are used because when the data is in the Access database graffiti is represented with a checkbox being clicked. ArcView reads the checkbox as '-1' and '0', with '-1' meaning the box was checked, and '0' meaning it was not. Hit 'OK' and a number of parcels will be selected, showing where graffiti is present in the neighborhood. You can continue to build on this selection if desired. Simply, click the 'Select by Attributes' button again and in the 'Method:' click the drop-down arrow, and select one of the options given. Once finished with your selection, you have a couple of different options. First, you can see a table of the selected parcels by opening the attribute table of the parcels layer and then clicking 'Show: Selected' instead of 'Show: All' at the bottom of the table. This will show a table view of all the parcels where graffiti exists. A second option is creating a layer from the selected features. This is useful for mapping and saving a selection instead of having to go through the entire first process every time. Once you have the features you want selected, right-click the Lyndale parcels layer from which the selection was made. Under 'Selection' click 'Create Layer from Selected Features'. This will add a layer containing the selected features to the map document. Now that the selected features have been added to the map, we can clear the selection. To do this, simply click the 'Clear Selected Features' button  . Also, if at any point in the selection process you want to start a selection over, you can hit this button.

Example # 3

A third example to display data is by using the relates that were created in the previous section. Let's say we want to find all of the parcels that had violations in the neighborhood. Open the 'Violations' table. Click the 'Options' menu at the bottom of the table and click 'Select All'. This will select all of the records in the table. To view which parcels that these violation records belong to, again click the 'Options' menu and under 'Related Tables' select the parcels layer. The parcels layer attribute table will automatically open. Close all of the tables and you can see that a number of the parcels are now selected. These are the parcels that have had violations. This selection can be saved similar to above.

Similarly, using the 'Select Features'  tool you can click and drag an area that you are interested in to select the parcels. Open the attribute table for the parcels layer. Again, click the 'Options' menu in the attribute table, select 'Related Tables', and select the related table you are interested in. The related table will open, and to see the RFS, violations, or rental licenses related to the selected parcels, click 'Show: Selected' instead of 'Show: All'. This gives you the ability not only to define an area of interest, but get a detailed view of what sort of violations or activities taking place in the area, and by what parcel.

These examples are in no way an exhaustive list of how to analyze this data. There are numerous methods to do so, but can be explored beyond this documentation. This guidance

simply provides some of the most basic and effective ways to analyze the data. Look through the *Help* documentation or go through introductory tutorials to learn new and various ways to look at data.

Creating Maps

Say you want to create a map to be printed off or to be able to send to someone as a .PDF document. This can also be done in ArcView. You have analyzed the data for whatever you are interested in and now you want to create a map to share with others. The first step is to switch to 'Layout View' in ArcView. This is done by clicking the  icon towards the bottom left of the screen. This will switch to a view that looks like a piece of paper. There are five things, other than the map itself that should be found on every map. They are, a title (appropriately describing the map), legend (so the reader knows what different colors mean), north arrow, scale bar, and descriptive information (ie. author, date of creation, data source). All of these options can be found under the 'Insert' menu at the top of the page.

Effective color schemes can greatly affect the influence a map can have on making decisions. To change colors of layers, double-click the layer you want to change, and click the 'Symbology' tab. From the 'Symbology' tab you can change how a layer is viewed as well as how different data within a layer is viewed. You can symbolize a single feature, using categories (ie. farmland, commercial, recreational, residential), or quantities (ie. 0-100 people, 100-200 people, 200-1,000 people). All of these different kinds of symbology depend on what type of map you are creating and the data you are representing.

Maps can be made to whatever size is desired using File → Page Setup. Once you are satisfied with your map you can export it as a .PDF document. This is done by selecting File → Export Map… You do not necessarily have to choose .PDF as the Save as type, but this is the common format for other documents.

CONCLUSION

This is simply guidance to assist with the Problem Properties project for the Lyndale Neighborhood Association. However, a number of the applications and tools may also be applied to various projects. If you are still having difficulty with a step in ArcMap, look at the *Help* documentation, it is amazing how much can be figured out by looking through it.

IX. SURVEY GUIDANCE

Lyndale Problem Properties Survey – May 2009

SURVEY GUIDE:

This guide's intent is to provide the surveyor with a better understanding of the categories on the survey and provide guidance on common problems to look for while conducting visual surveys of properties. An example of what the survey layout looks like is provided at the end of this guidance. If a property has one of the listed problems on the survey, simply check that box. If you feel a problem exists with that property, but it is not found on the survey, use the *Comments* section to explain.

LOCATION INFO:

A map will be provided for each surveyor to help locate which survey relates to a given property. In addition, the Lyndale Property ID (LYN PID) and address are included for each property. The LYN PID was generated by LNA for properties in the neighborhood. A grid was created specifically for the neighborhood (the letter/number combination in the LYN PID). Then, the second part of the LYN PID is the house number for a property. Together, each property is unique. Data gathered by the survey will be entered using the LYN PID and/or address.

SIGNAGE:

Vacant: A property that is not occupied or free from activity or work.

Boarded: Doors, windows, and other openings have been boarded.

For Rent / For Sale: A sign is posted detailing whether a property is for rent or sale.

Utilities Shut-off Notice: A paper notice is visible (typically on the front door) stating that the utilities have been turned off at this property.

Condemn Notice: A paper notice is visible (typically on the front door) stating that the property has been condemned. Notice typically provides reason for condemnation. Make note in comments section of reason.

Construction Permit: A construction permit is visible (either on a door or in a window).

BUILDING CONDITION RATING:

The building condition rating used for the survey follows the same rating scheme used by the city of Minneapolis. This rating system was adopted so that future comparisons between LNA collected data and city data can be easily assessed.

IMPORTANT NOTE: This is not an attempt to take a real estate inventory for the Lindale Neighborhood. The intent is to determine whether a property poses a risk to the public's health and safety. We are interested if the property is functional in its role as a place of residence or commerce. EXAMPLE: A house with freshly painted, bright pink trim, and dark green siding may be in '2 : Good' condition. It may not be pleasing to your eye, but it is fully functional and the owner has taken initiative to maintain his/her property. There are places to put positives and comments, and this is where you would note the great things about the property. For the condition rating, it is strictly the overall condition of the property. Naturally, the newer the property, it will typically have a better condition rating.

The guidelines are as follows:

1 : Excellent
This rating represents a property in new, or near new condition. There are no observable construction defects, and no observable maintenance requirements. This condition rating is appropriate for older properties that have been recently totally rehabbed. This means new doors, windows, siding, roof, etc. It should not be used for older properties with more modest remodeling.

2 : Good
This rating represents properties in significantly better condition than average. If they are more than 20 years old the roof, doors, and windows have been replaced. There is no evidence of settling problems; siding, doors, and windows show only modest wear and tear. There will be few minor maintenance items.

3 : Average +
This rating represents properties that are in better condition than average. They may be properties of any age that have been well maintained. Short-lived items have probably been replaced recently. There is no evidence of settling problems. The siding, windows and doors show modest wear and tear. This condition rating would be appropriate for a property that is otherwise in average condition but has had significant remodeling to a portion of the house or recent addition.

4 : Average
This is the midway range in the condition category and represents the largest grouping. The basis is that the average structure in Minneapolis is in satisfactory condition and is a desirable property as living or working quarters. The maintenance requirements are being satisfactorily covered and the building

is saleable, or would be with minor repair. No major defects are observable; a number of minor items may be seen. Many items such as roof, windows, and exterior are showing some deterioration, but are still reliable and do not require immediate repair.

5 : Average -
This condition is modestly below that of average. It represents a property that is for the most part in satisfactory condition with no list of major deferred maintenance. There are no significant foundation problems, siding, roof. Some short-lived items appear tired or in need of replacement.

6 : Fair
The condition is significantly below average. It represents a property that is structurally sound but has a significant amount of deferred maintenance. There should be no significant foundation problems however, siding, roofing, are old and show signs of significant wear. If not in need of immediate replacement, they are definitely at the end of their useful life.

7 : Low
These properties have numerous problems. The property foundation may have large cracks or substantial settling. Most of the building components are in need of repair or replacement such as; rotting wood, and holes. Heating and plumbing systems may be unreliable. The house is still inhabitable, but bringing the house up to average condition would require major expenditures. The cost to cure may out-weigh the entire value of the home.

8 : Uninhabitable
Represents properties at the end of their economic life. The property is uninhabitable, beyond repair, probably condemned and likely to be wrecked in the near future.

GROUNDS & STRUCTURE PROBLEMS

Absence of grass, ground cover, etc.: Bare dirt is visible and it is NOT part of landscaping or a flower garden. Looks like there has been a lot of foot or vehicle traffic in and out of the property, removing ground cover. Reminder: This is spring in MN and grass may still look dormant. Use your discression.

Erosion: Due to lack of grass or ground cover runoff is causing erosion to occur.

Weeds, Shrubs, Trees, Overgrowth: Grass has not been cared for and weeds are present. Shrubs or trees have taken over and the property owner is clearly not maintaining the grounds.

Cracked sidewalks, steps, or driveways: Sidewalks, steps, or driveways have a major problem with cracking or excessive wear. Note: this is MN and cracking of concrete is normal and it is NOT what we are interested in. We are interested in excessive disrepair.

Trees, shrubs obstructing sidewalks: Trees or shrubs are obstructing movement along the sidewalk.

Trash / Litter on the Ground: There is trash and litter in and across the yard. May also include branches and limbs.

Garbage Overflowing: Excessive amounts of garbage overflowing from dumpsters. Does not necessarily need to be next to a dumpster. NOTE: Garbage pickup occurs on different days. Look for excessive amounts of garbage that looks more like litter than someone's garbage.

Cracked / Broken Windows: Windows are cracked or have been broken.

Siding or Trim pealing, cracked, falling, or deteriorated: The siding or trim is showing its age and has not been maintained. Pieces are falling apart or missing. Paint is chipping and peeling.

Shingles or Roofing is deteriorating: Roofing is showing aging. Shingles are falling, cracking, peeling, and non-functional. Areas are visible where leaking is likely.

PUBLIC SAFETY ISSUES

Graffiti: Graffiti is present on the property. Mark that it is present even if it has been covered, but still noticeable. In the comments section describe where the graffiti is located on the property (eg. garage).

Evidence of drug dealing: There is evidence that drug dealing is taking place at the property. Visual evidence of a drug deal may occur, but more likely to see suspicious activity, such as traffic in and out of a property.

Evidence of prostitution: Evidence that prostitution is taking place at a property. Again, this is unlikely to be directly visible, but similar to drug dealing there may be signs pointing to such activity.

Loitering is taking place: A group of individuals are hanging around a property. Clearly marking an area as their territory, often times, making others feel uncomfortable as they pass by. This may occur at a place of residence or commercial property.

Public consumption of drugs and alcohol: Visual evidence of someone consuming drugs or alcohol.

Animals are posing a threat: Animals on a specific property are a safety threat to people who may be passing by. Example: A dog that is threatening as you walk by.

Steady stream of pedestrian or drive thru traffic: People are continuously going in and out of a property. A steady stream of multiple people coming in and out of a property can be a sign of illegal activity taking place.

Verbally threatening tenant: The tenant of a property is threatening to people (including you) who are passing by the property. Makes others feel threatened as they enter an area.

POSITIVES

Planted boulevard garden: Property owner has taken initiative to improve the aesthetic quality of their property by planting a boulevard garden.

New addition or garage: There has recently been an addition or garage added to the property within the last couple of years. The addition or garage is completed and in excellent condition.

Curb appeal / landscaping: It is evident that the property owner takes great pride in the aesthetic quality of their property. The property has been landscaped and is a bright spot to the block (neighborhood). This may be where you mark whether or not you truly like the way a property looks, not its functionality.

New roof or windows: The roof or windows have been replaced on the property. It is evident that within the last year or two the property owner has replaced the roof or windows.

COMMENTS

The comments section is for the surveyor to place notes regarding the property. Notes may range across a number of the sections in the survey. Examples of comments include:

- Location of graffiti on property
- Currently be worked on
- Any suspicious activity
- Positives not listed
- Reason for being condemned
- etc.

Use your own discretion of including things that you feel may be helpful in monitoring problem properties and public safety in the Lyndale neighborhood. REMINDER: Comments need to be entered, so be sure to make them precise and to the point, while also providing enough information. Try to be as efficient and consistent as possible.

SURVEY EXAMPLE

Lyndale Problem Properties Survey

May 2009

Surveyor Name: **Survey Date:**

LYN PID A10 3520

ADDRESS

3520 PILLSBURY AVE

☐ Vacant ☐ Boarded
☐ For Rent ☐ For Sale
☐ Utilities Shut Off Notice
☐ Condemn Notice
☐ Construction Permit

Overall Building Condition:

1 : Excellent
2 : Good
3 : Average +
4 : Average
5 : Average -
6 : Fair
7 : Low
8 : Uninhabitable

Grounds & Structure Problems

☐ Absence of grass, ground cover, etc.
☐ Erosion
☐ Weeds,Shrubs, Trees, Overgrowth
☐ Cracked Sidewalks, Steps, or Driveways
☐ Trees, Shrubs Obstructing Sidewalks
☐ Trash/Litter on the Ground
☐ Garbage Overflowing
☐ Cracked/Broken Windows
☐ Siding or Trim pealing, cracked, falling, or deteriorated (home)
☐ Shingles or roofing is deteriorating (home
☐ Deteriorating Garage

Public Safety Issues

☐ Graffiti
☐ Evidence of Drug Dealing
☐ Evidence of Prostitution
☐ Loitering is taking place
☐ Public consumption of drugs and alcohol
☐ Animals are posing a threat
☐ Steady stream of pedestrian or drive thru traffic
☐ Verbally threatening tenant

Positives

☐ Planted boulevard garden
☐ New addition or garage
☐ Curb Appeal/Landscaping
☐ New roof or windows

Comments:

LYN PID A10 3524

ADDRESS

3524 PILLSBURY AVE

☐ Vacant ☐ Boarded
☐ For Rent ☐ For Sale
☐ Utilities Shut Off Notice
☐ Condemn Notice
☐ Construction Permit

Overall Building Condition:

1 : Excellent
2 : Good
3 : Average +
4 : Average
5 : Average -
6 : Fair
7 : Low
8 : Uninhabitable

Grounds & Structure Problems

☐ Absence of grass, ground cover, etc.
☐ Erosion
☐ Weeds,Shrubs, Trees, Overgrowth
☐ Cracked Sidewalks, Steps, or Driveways
☐ Trees, Shrubs Obstructing Sidewalks
☐ Trash/Litter on the Ground
☐ Garbage Overflowing
☐ Cracked/Broken Windows
☐ Siding or Trim pealing, cracked, falling, or deteriorated (home)
☐ Shingles or roofing is deteriorating (home
☐ Deteriorating Garage

Public Safety Issues

☐ Graffiti
☐ Evidence of Drug Dealing
☐ Evidence of Prostitution
☐ Loitering is taking place
☐ Public consumption of drugs and alcohol
☐ Animals are posing a threat
☐ Steady stream of pedestrian or drive thru traffic
☐ Verbally threatening tenant

Positives

☐ Planted boulevard garden
☐ New addition or garage
☐ Curb Appeal/Landscaping
☐ New roof or windows

Comments:

LYN PID A10 3528

ADDRESS

3528 PILLSBURY AVE

☐ Vacant ☐ Boarded
☐ For Rent ☐ For Sale
☐ Utilities Shut Off Notice
☐ Condemn Notice
☐ Construction Permit

Overall Building Condition:

1 : Excellent
2 : Good
3 : Average +
4 : Average
5 : Average -
6 : Fair
7 : Low
8 : Uninhabitable

Grounds & Structure Problems

☐ Absence of grass, ground cover, etc.
☐ Erosion
☐ Weeds,Shrubs, Trees, Overgrowth
☐ Cracked Sidewalks, Steps, or Driveways
☐ Trees, Shrubs Obstructing Sidewalks
☐ Trash/Litter on the Ground
☐ Garbage Overflowing
☐ Cracked/Broken Windows
☐ Siding or Trim pealing, cracked, falling, or deteriorated (home)
☐ Shingles or roofing is deteriorating (home
☐ Deteriorating Garage

Public Safety Issues

☐ Graffiti
☐ Evidence of Drug Dealing
☐ Evidence of Prostitution
☐ Loitering is taking place
☐ Public consumption of drugs and alcohol
☐ Animals are posing a threat
☐ Steady stream of pedestrian or drive thru traffic
☐ Verbally threatening tenant

Positives

☐ Planted boulevard garden
☐ New addition or garage
☐ Curb Appeal/Landscaping
☐ New roof or windows

Comments:

X. CONCLUDING THOUGHTS TO LONG – TERM SUCCESS

It is the hope that a detailed guidance like this will help LNA maintain the long – term monitoring of problem properties in the neighborhood. Many neighborhood organizations have conducted similar projects such as this, but have not been maintained over long periods of time. To effectively examine problem properties long term monitoring is needed. This is in no way a completed project. Given this is the first year of the project, it is the hope that it will continue to evolve into a well managed and maintained system that is kept up to date, and doesn't become a thing of the past. As the neighborhood association continues to develop a better definition on how they will use this system they will be able to modify it to better fit their needs. This provides a starting point to build off of.

It is the belief that over time this system will help LNA more effectively react to problem properties and provide assistance to citizens of the neighborhood. This is contingent upon the system being managed and maintained over several years. This system will also help LNA communicate with the city of Minneapolis. It will provide the neighborhood organization with evidence that can be taken to the city to say here is what has been going on in the neighborhood for a period of time. Maps, tables, graphs, and data help state one's case when trying to make a statement to an official.

In discussions with the city of Minneapolis throughout this project, they stated that they are developing a similar system to monitor properties throughout the city. The thought being that it will be similar to the MNIS (Early Warning) system that existed previously, but failed or became out of date. I would suggest that when this new system is deployed to try and incorporate it into LNA's existing problem property system. This will only help to improve communication with the city of Minneapolis. However, I would not become dependent on the city's system as with the MNIS system it didn't last.

One final suggestion is to try and keep the system as simple and concise as possible. Given the size and number of other responsibilities that LNA has, if the system becomes too cumbersome it will also become out-of-date and not maintained. This is a difficult task, but it is a thought that should remain in the back of your head when continuing development of the system. Come up with a similar naming scheme and organized folders so that year after year it is consistent, which will help when comparing long – term.

The next steps will be to test out the system and use it to try and manage problem properties in the neighborhood. Find some of the worst properties in the neighborhood, take them to the next Problem Property meeting, and discuss possible actions to take. Keep track of what is effective and build off of that. As this initiative continues, guidance as how to handle a specific problem should be put in place. While each problem will likely be unique, having a guide in place will help develop a consistent framework for resolving problems.

As the Problem Property Information Management System was demoed for LNA staff, their feedback was that this will be extremely helpful to identify properties that pose the greatest conflicts in the neighborhood. It also became evident that they will use it well beyond looking at problem properties. There was already interest in using it for organizing block club leaders, linking to a neighborhood tree survey, and much more. While this report provides specific guidance for examining problem properties in the Lyndale neighborhood, the same steps can be used for relatively any project across communities, neighborhoods, non-profits, etc. The biggest hurdle for any organization to implementing an information management system such as this is becoming familiar with the software (ESRI ArcGIS, Microsoft Access) and determining how to get the appropriate information out of it. This report hopes to serve multiple facets. One as guidance for monitoring problem properties, and two, be an initial spark of interest as well as develop ideas of how this technology can be applied to a specific organizations goals and objectives.

I would like to give a special thanks to Norma Pietz and Mark Hinds with the Lyndale Neighborhood Association for giving me this opportunity. It was a pleasure working with you and the rest of the staff and volunteers.

~Kody Thurnau